Florida Standards Assessments

Secure Browser Installation Manual

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Prepared by the American Institutes for Research®

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Section I. Introduction to the Secure Browser Manual

The secure browser is an application for taking online Florida Standards Assessments (FSA). The secure browser prevents students from accessing other computer/device or Internet applications and from copying test information as it occupies the entire computer screen.

Scope

This manual provides instructions for installing the secure browser on computers and devices used for online assessments.

System Requirements

For the secure browser to work correctly, the computer or device on which you install it must have a supported operating system. To access a list of supported operating systems, see the *System Requirements for Online Testing* available in the Technology Resources section of the FSA Portal at www.FSAssessments.org/technology-resources.

Manual Content

This manual is organized as follows:

- Section I, Introduction to the Secure Browser Manual (this section), describes this guide.

- Section II, Installing the Secure Browser on Desktops and Laptops, includes instructions for installing the secure browser onto supported Windows, Mac, and Linux platforms.

- Section III, Installing the Secure Browser on Mobile Devices, includes instructions for installing the mobile secure browser on supported iOS, Android, and Chrome OS platforms.

- Section IV, Proxy Settings for Desktop Secure Browsers, provides commands for specifying proxy servers that the secure browser should use.

- Appendix A, Creating Group Policy Objects, describes how to create scripts that launch when a user logs into a Windows computer.

- Appendix B, Resetting Secure Browser Profiles, provides instructions for resetting secure browser profiles.

- Appendix C, User Support, provides Help Desk information.

Intended Audience

This installation guide is intended for the following audiences:

- Technology coordinators familiar with downloading installation packages from the Internet or from a network location and installing software on Windows, Mac OS X, or Linux operating systems or Chromebook, iPad, or Android devices.

- Network administrators familiar with mapping or mounting network drives, and creating and running scripts at the user and host level.

- Those installing and running the secure browser from an NComputing server who are familiar with operating that software and related hardware.

Document Conventions

Table 1 lists typographical conventions and key symbols.

Table 1. Document conventions

Element	Description
⚠️	**Warning:** This symbol accompanies important information regarding actions that may cause fatal errors.
⚠️	**Caution:** This symbol accompanies important information regarding a task that may cause minor errors.
📝	**Note:** This symbol accompanies additional information that may be of interest.
TIP	**Tip:** This symbol accompanies useful information on how to perform a task.
filename	Monospaced text indicates a directory, filename, or something you enter in a field.
text	Bold text indicates a link or button that is clickable.

Other Resources

- For information about supported operating systems and web browsers, see the *System Requirements for Online Testing*.

- For information about securing a computer before a test session, see the *Test Administrator User Guide*.

- For information about network and Internet requirements, general peripheral and software requirements, and configuring text-to-speech settings, see the *Technical Specifications Manual for Online Testing*.

These documents are available on the FSA Portal (http://www.FSAssessments.org).

Section II. Installing the Secure Browser on Desktops and Laptops

This section contains installation instructions for Windows and Mac under a variety of deployment scenarios. Some scenarios describe 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 on Windows

This section provides instructions for installing the secure browser on computers running supported versions of Windows (found on the Secure Browser page on the FSA Portal). The secure browser does not run on other versions of Windows.

The instructions in this section assume machines are running a 64-bit version of Windows and that the secure browser will be installed to

> `C:\Program Files (x86)\`.

If you are running a 32-bit version of Windows, adjust the installation path to

> `C:\Program Files\`.

Installing the Secure Browser on an Individual Computer

This section contains instructions for installing the secure browser on individual computers.

Installing the Secure Browser via Windows

In this scenario, a user with administrator rights installs the secure browser using standard Windows. (If you do not have administrator rights, refer to the section <u>Installing the Secure Browser Without Administrator Rights</u>.)

1. If you installed a previous version of the secure browser in a location other than

    > `C:\Program Files (x86)\` (64 bit) or `C:\Program Files)\FSASecureBrowser\` (32 bit),

    manually uninstall the previous version. (If you installed the previous version in the default location, the installation package automatically removes it.) See the instructions in the section <u>Uninstalling the Secure Browser on Windows</u>.

2. Navigate to the **Secure Browser** card on the FSA Portal (http://www.FSAssessments.org). Under **Access Secure Browsers**, click the **Windows** tab, then click **Download Browser**. A dialog window opens.

3. Do one of the following (this step may vary depending on the browser you are using):

    o   If presented with a choice to **Run** or **Save** the file, click **Run**. This opens the Secure Browser Setup wizard.

    o   If presented only with the option to **Save**, save the file to a convenient location. After saving the file, double-click the installation file

        `FSASecureBrowser-Win.msi`

        to open the setup wizard.

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

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

    o   The secure browser to the default location

            `C:\Program Files (x86)\FSASecureBrowser\` (64 bit)

        or

            `C:\Program Files)\FSASecureBrowser\` (32 bit).

    o   A shortcut `FSASecureBrowser` 🌐 is added to the desktop.

6. 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.

7. *Optional:* Apply proxy settings by doing the following:

    a. Right-click the shortcut `FSASecureBrowser` 🌐 on the desktop, and select **Properties**.

    b. Under the **Shortcut** tab, in the **Target** field, modify the command to specify the proxy. See Table 3 for available forms of this command.

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

For more information about proxy settings, see Section IV, Proxy Settings for Desktop Secure Browsers.

8. Run the browser by double-clicking the `FSASecureBrowser` 🌐 shortcut on the desktop. The secure browser opens displaying the student login screen. The browser fills the entire screen and hides the task bar.

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

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 <u>Installing the Secure Browser Without Administrator Rights</u>.

1. If you installed a previous version of the secure browser in a location other than

        `C:\Program Files (x86)\` (64 bit) or `C:\Program Files\` (32 bit),

    manually uninstall the previous version. (If you installed the previous version in the default location, the installation package automatically removes it.) See the instructions in the section <u>Uninstalling the Secure Browser on Windows</u>.

2. Navigate to the **Secure Browser** card on the FSA Portal (<u>http://www.FSAssessments.org</u>). Under **Access Secure Browsers**, click the **Windows** tab, then click **Download Browser**. A dialog window opens.

3. Save the file on the computer (this step may vary depending on the browser you are using):

    o   If presented with a choice to **Run** or **Save** the file, click **Save**, and save the file to a convenient location.

    o   If presented only with the option to **Save**, save the file to a convenient location.

4. Note the full path and filename of the downloaded file, such as

          `c:\temp\FSASecureBrowser-Win.msi`.

5. Open a command prompt as the administrator by doing the following:

    a. Click **Start**, and locate the Command Prompt application. (In some versions of Windows the application is under **All Programs > Accessories > Command Prompt**.)

    b. Right-click **Command Prompt**, and select **Run as Administrator**.

    c. As necessary, type the administrator password for the computer. The command prompt opens.

    (You need to do step 5 only once for the current login. The next time you open the command prompt, Windows retains the administrator role.)

6. Run the command

   ```
   msiexec /I <Source> [/quiet] [INSTALLDIR=<Target>]
   ```

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

   <Target>   Path to the location where you want to install the secure browser. If absent,
                 installs to the directory described in step 8. 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\FSASecureBrowser-Win.msi /quiet
   INSTALLDIR=C:\AssessmentTesting\BrowserInstallDirectory
   ```

   installs the secure browser from the installation package at

   ```
   C:\temp\FSASecureBrowser-Win.msi
   ```

   into the directory

   ```
   C:\AssessmentTesting\BrowserInstallDirectory
   ```

   using quiet mode.

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

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

   o The secure browser to the default location

     ```
     C:\Program Files (x86)\FSASecureBrowser\
     ```
     (64 bit)

     or

     ```
     C:\Program Files\
     ```
     (32 bit).

   o A shortcut `FSASecureBrowser` is added to the desktop.

9. 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.

10. Run the browser by double-clicking the `FSASecureBrowser` shortcut on the desktop. The secure browser opens displaying the student login screen. The browser fills the entire screen and hides the task bar.

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

Sharing the Secure Browser over a Network

In this scenario, you install the secure browser on a server's shared drive, and you also create a shortcut to the secure browser's executable on each testing computer's desktop. This assumes that all testing computers have access to the shared drive. **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.**

1. On the remote computer from where the students run the secure browser, install the secure browser following the directions in the section <u>Installing the Secure Browser on an Individual Computer</u>.

2. On each testing machine, sign in and 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 desktop shortcut `FSASecureBrowser` from the remote machine to the directory

      `C:\Users\Public\Public Desktop.`

   c. Run the browser by double-clicking the `FSASecureBrowser` shortcut on the desktop. The secure browser opens displaying the student login screen. The browser fills the entire screen and hides the task bar.

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

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 in the section <u>Installing the Secure Browser on an Individual Computer</u>. Note the path of the installation directory, such as

   `C:\Program Files (x86)\FSASecureBrowser.`

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:\AssesssmentTesting\.`

   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:\AssesssmentTesting\,`

   you are creating a new folder

   `c:\AssesssmentTesting\FSASecureBrowser.`

   c. Copy the shortcut

   `c:\AssesssmentTesting\FSASecureBrowser\FSASecureBrowser.exe - Shortcut.lnk`

   to the desktop.

   d. Run the browser by double-clicking the `FSASecureBrowser` 🌐 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. On 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.

For a listing of supported terminals and servers for this scenario, see *System Requirements for Online Testing*, available on the FSA Portal.

1. Log in to the machine running the Windows server.

2. Install the secure browser following the directions in the section <u>Installing the Secure Browser on an Individual Computer</u>.

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

    ```
    "C:\Program Files (x86)\FSASecureBrowser\FSASecureBrowser.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 <u>Appendix A</u>, <u>Creating Group Policy Objects</u>.

6. On each NComputing console, create a new `FSASecureBrowser` 🌐 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)\FSASecureBrowser\.
        ```

    e. Right-click the file

        ```
        FSASecureBrowser.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)\FSASecureBrowser\
FSASecureBrowser.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, 2012 R2, and 2016.

> ⚠️ **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.

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)\FSASecureBrowser)
    ```

    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

    ```
    FSASecureBrowser.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.

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 `FSASecureBrowser` 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\FSASecureBrowser.exe`.

      `/X`   Perform an uninstall.

      `[/quiet]`   Quiet mode, no interaction.

For example, the command

    `msiexec /X C:\AssessmentTesting\FSASecureBrowser.exe /quiet`

uninstalls the secure browser installed at

    `C:\AssessmentTesting\`

using quiet mode.

Installing the Secure Browser on Mac OS X

This section provides instructions for installing the secure browsers on Macintosh computers.

Installing the Secure Browser

In this scenario, a user installs the secure browser on desktop computers running supported versions of Mac OS X (found on the Secure Browser page on the FSA Portal). The steps in this procedure may vary depending on your version of Mac OS X and your web browser.

1. Remove any previous versions of the secure browser by dragging its folder to the Trash.

2. Navigate to the **Secure Browser** card on the FSA Portal (http://www.FSAssessments.org). Under **Access Secure Browsers**, click the **Mac OS X** tab, then click **Download Browser**. If prompted for a download location, select your Downloads folder.

3. Open Downloads from the Dock, and click

        FSASecureBrowser-OSX.dmg

    to display its contents.

4. Drag the `FSASecureBrowser` icon to the desktop.

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. For Mac OS 10.7 through 10.12, disable Mission Control/Spaces. Instructions for disabling Spaces are in the *Technical Specifications Manual for Online Testing*, available on the FSA Portal.

7. Double-click the `FSASecureBrowser` icon on the desktop to launch the secure browser. (You must launch the secure browser to complete the installation.) The secure browser opens displaying the student login screen. The browser fills the entire screen and hides the dock.

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

Cloning the Secure Browser Installation to Other Macs

Depending on your networking and permissions, it may be faster to install the secure browser onto a single Mac, take an image of the disk, and copy the image to other Macs.

To clone the secure browser installation to other computers:

1. On the computer from where you will clone the installation, do the following:

    a. Install the secure browser following the directions in the section <u>Installing the Secure Browser</u>. Be sure to run and then close the secure browser after the installation.

    b. In Finder, display the **Library** folder.

    c. Open the **Application Support** folder. See <u>Figure 22</u>.

    d. Delete the folder containing the secure browser.

    e. Delete the `Mozilla` folder.

2. Create a shell script that creates a new secure browser profile when a user logs in. The basic command to create a profile is

    ```
    <install_directory>/Contents/MacOS/FSASecureBrowser --CreateProfile
    profile_name,
    ```

    where

    ```
    profile_name
    ```

    is unique among all testing computers.

3. Clone the OS X image.

4. Deploy the image to the target Macs.

Uninstalling the Secure Browser on OS X

To uninstall an OS X secure browser, drag its folder to the Trash.

Installing the Secure Browser on Linux

This section provides instructions for installing the secure browser on computers running a supported Linux distribution. For more information about Linux requirements, refer to the *Technical Specifications Manual for Online Testing*, available on the FSA Portal.

Installing the Secure Browser on 32-Bit Distributions

The instructions in this section are for installing the Linux secure browser onto 32-bit versions of Linux systems. These instructions may vary for your individual Linux distribution.

1. Uninstall any previous versions of the secure browser by deleting the directory containing it.

2. Navigate to the **Secure Browser** page of the FSA Portal (http://www.FSAssessments.org). Click the **Linux** tab, then click **Download Browser**. Save the file to the desktop.

3. Right-click the downloaded file

        FSASecureBrowser-Linux.tar.bz2,

    and select **Extract Here** to expand the file. This creates the FSASecureBrowser folder on the desktop.

4. In a file manager, open the FSASecureBrowser folder.

5. For Ubuntu, disable automatic running of scripts by doing the following (otherwise skip to step 7):

    a. From the menu bar, select **Edit > Preferences**.

    b. On the **Behavior** tab, mark the **Ask each time** radio button.

6. Click **Close**.

7. Change the installation script to executable by doing the following:

    a. Right-click the file install-icon.sh, and select **Properties**.

    b. On the **Permissions** tab, mark the **Allow executing file as a program** checkbox.

8. Click **Close**.

9. Double-click the file

    ```
    install-icon.sh
    ```

    and click **Run in Terminal**. The installation script prompts you for the root or super-user password you obtained in step 2.

10. Enter the password. The script installs all dependent libraries and supported voice packs, and creates a `FSASecureBrowser` icon on the desktop.

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.

If testing with the text-to-speech accommodation takes place on this computer, reboot it.

11. From the desktop, double-click the `FSASecureBrowser` icon to launch the browser. The student login screen appears. The browser fills the entire screen and hides any panels or launchers.

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

Installing the Secure Browser on 64-Bit Linux Distributions

Use the following procedure to install the secure browser on 64-bit machines.

1. Using Table 2 as a guide, install the 32-bit compatibility libraries for your distribution. If your distribution does not appear in Table 2, consult its documentation for 32-bit compatibility.

2. Install the secure browser by following the procedure in the section Installing the Secure Browser on 32-Bit Distributions.

Table 2 lists the commands for installing 32-bit compatibility libraries for popular Linux distributions.

Table 2. Commands for installing 32-bit compatibility libraries

Distribution	Command
Fedora 23–25	`sudo yum install glibc.i686 nspr.i686 gtk2.i686 xulrunner.i686`
openSUSE 13.1	`zypper install glibc-32bit`
Red Hat Enterprise Linux 6.5	`sudo yum install xulrunner.i686 libgtk-x11-2.0.50.0 libxcom.so glibc.i686`
Ubuntu (LTS) 12.04, 14.04	`sudo apt-get install libgtk2.0.0:i386 libstdc++6:i386 libasound2:i386 libasound2-plugins:i386 libdbus-glib-1-2:i386 libXt6:i386 libreadline6:i386`

Uninstalling the Secure Browser on Linux

To uninstall a secure browser, delete the directory containing it.

Section III. Installing the Secure Browser on Mobile Devices

This section contains information about installing AIRSecureTest, the secure browser app for iOS, Android, and Chrome OS. For information about configuring supported tablets and Chromebooks to work with the secure browser, refer to the *Technical Specifications Manual for Online Testing*, available on the FSA Portal (http://www.FSAssessments.org).
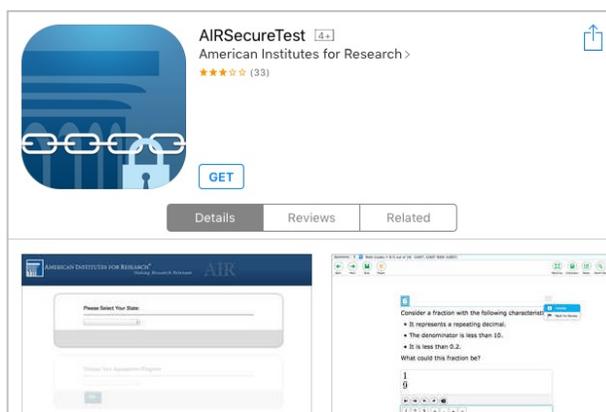
Installing the Secure Browser on iOS

This section contains instructions for downloading and installing AIRSecureTest and selecting your state and assessment program. The process for installing the secure browser is the same as for any iOS application. (To install the secure browser on many iOS devices simultaneously, consider using Autonomous Single App Mode. For details, see the section "Configuring Using Autonomous Single App Mode" in the *Technical Specifications Manual for Online Testing*.)

For individual app downloads of AIRSecureTest, follow these steps:

1. On your iPad, navigate to the FSA Portal (http://www.FSAssessments.org).

2. Click the **Secure Browser** card.

3. Click the **iOS** tab. Click **Download on the App Store**. (You can also search for `AIRSecureTest` in the App Store to find the secure browser app.) The AIRSecureTest download page opens.

Figure 1. iOS App Store

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4. Tap ⬚GET. The iPad downloads and installs the secure browser, and the icon changes to **Open**.

   After installation, an AIRSecureTest icon appears on the iPad's home screen.

Figure 2. AIR Secure Test App in iOS

---

5. Tap **Open**. The first time you open AIRSecureTest, a launchpad appears. The launchpad establishes the state and test administration for your students.

---

6. Configure the test administration by following the procedure in the section [Opening the AIRSecureTest Mobile App and Selecting the Assessment Program](#).

Installing AIRSecureTest on Android

You can download AIRSecureTest from the FSA Portal or from the Google Play store. The process for installing the secure browser is the same as for any other Android application.

This section contains instructions for downloading and installing AIRSecureTest and selecting your state and assessment program.

## Downloading and Installing the Android AIRSecureTest Mobile Secure Browser

1. On your Android tablet, navigate to the FSA Portal at (http://www.FSAssessments.org).

2. Click the **Secure Browser** card.

3. Tap the Android tab. Click the **Get it on Google play** link. (You can also search for "AIRSecureTest" in the Google Play store to find the secure browser app.)

4. The AIRSecureTest application download page appears.

Figure 3. Google Play Store

5. Tap **Install**, and then tap **Accept**. The tablet downloads and installs the secure browser.

Figure 4. Install
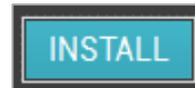
6. Tap **Open**. (After installation, and
    AIRSecureTest icon appears on the
    tablet's home page.)

7. Configure the test administration by
    following the procedure in the section
    Opening the AIRSecureTest Mobile App
    and Selecting the Assessment Program.

Figure 5. AIR Secure Test Icon

⚠️ **Caution: Android Secure Browser Keyboard**

If the secure browser keyboard has not been selected via device settings on Android tablets, it will need to be selected upon opening the AIRSecureTest app.

For more information about the Android secure browser keyboard, including instructions for enabling it, refer to the *Technical Specifications Manual for Online Testing*, available on the FSA Portal (http://www.FSAssessments.org), Technology Resources page.

Installing AirSecureTest on Chrome OS

This section contains instructions for installing AIRSecureTest, the secure browser app for Chrome OS, as a kiosk application.

Installing AIRSecureTest as a Kiosk App on Standalone Chromebooks

These instructions are for installing the AIRSecureTest secure browser on standalone Chromebook devices.

🔺 **Warning:** Step 5 of this procedure erases all data on the Chromebook. Before wiping, be sure to back up any data.

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1. From your network administrator, obtain the following:

    o   The wireless network to which the Chromebook connects. This typically includes the
        network's SSID, password, and other access credentials.

    o   An email and password for logging in to Gmail.

---

2. Power off, then power on your Chromebook.

---

3. If the `OS verification is Off` message appears (similar to [Figure 8](#)), do the following (otherwise skip to step [5](#).):

    a. Press **Space**. In the confirmation screen, press **Enter**. The Chromebook reboots.

    b. In the Welcome screen (see [Figure 10](#)), select your language, keyboard, and enter the network name and password you obtained in step 1. Back in the Welcome screen, click **Continue**.

    c. In the Google Chrome OS Terms screen, click **Accept and continue**. The Sign in screen appears.

4. If this Chromebook was already wiped and configured for a wireless network, skip to step 10; otherwise, continue with step 5.

5. In the Sign in screen, wipe the Chromebook by doing the following:

    a. Press **Esc** + ↻ + ⏻. A yellow exclamation mark appears similar to that in [Figure 6](#).

Figure 6. Chrome OS Missing Message

Chrome OS is missing or damaged. Please insert a recovery USB stick.

    b. Press **Ctrl + D**. The message in [Figure 7](#) appears.

Figure 7. Turn OS Verification Off Message

To turn OS verification OFF, press Enter.
Your system will reboot and local data will be cleared.
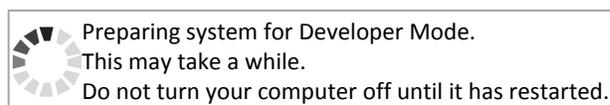
To go back, press ESC.

    c. Press Enter. A message similar to that in [Figure 8](#) appears.

Figure 8. OS Verification Off Message

OS verification is **OFF**
Press SPACE to re-enable.

d. Press **Ctrl + D**. The Chromebook indicates it is transitioning to developer mode (see Figure 9). The transition takes approximately 10 minutes, after which the Chromebook reboots.
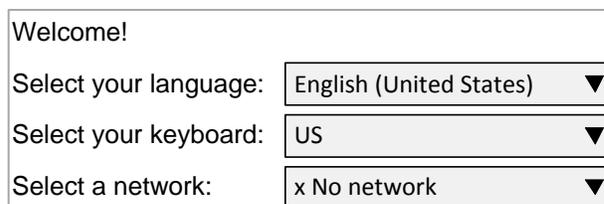
Figure 9. Preparing for Developer Mode Message

Preparing system for Developer Mode.
This may take a while.
Do not turn your computer off until it has restarted.

e. After the Chromebook reboots, the

```
OS verification is Off
```

message appears again (see Figure 8). Press **Space**, then press **Enter**. The Chromebook reboots, and the Welcome screen appears (see Figure 10).

Figure 10. Welcome Screen

Welcome!

Select your language: English (United States) ▼

Select your keyboard: US ▼

Select a network: x No network ▼

6. In the Welcome screen, select your language, keyboard, and network. The Join WiFi network screen appears (see Figure 11).

7. Enter the network's password you obtained in step 1.

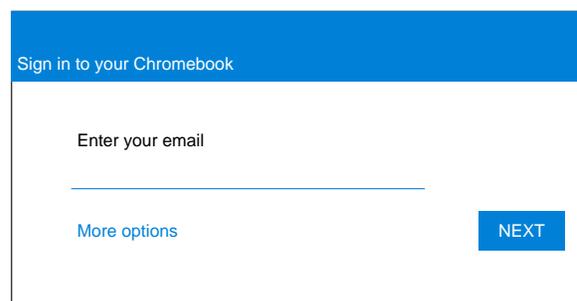8. Click **Connect**, and back in the Welcome screen click Continue.
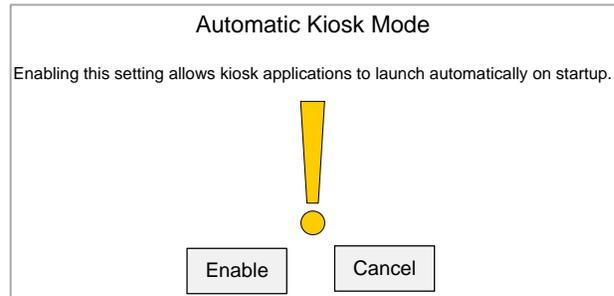
Figure 11. Join WiFi Network Screen

Join WiFi network

SSID   AIRNetwork

Password   ● ● ● ● ● ● ●

Connect   Cancel
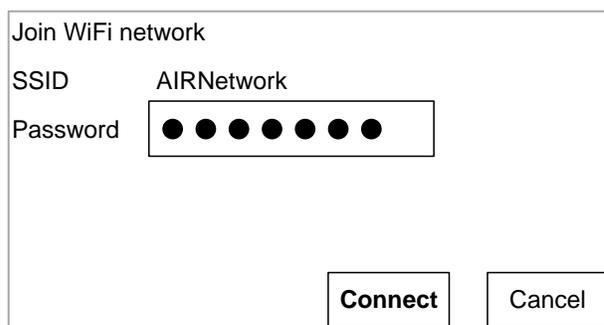
9. In the Google Chrome OS Terms screen, click Accept and continue. The Sign in screen appears (see Figure 12).

Figure 12. Sign in Screen

Sign in to your Chromebook

Enter your email
_____

More options   NEXT

10. In the Sign in screen, press **Ctrl** + **Alt** + **K**. The Automatic Kiosk Mode screen appears (see Figure 13).

Figure 13. Automatic Kiosk Mode Message

Automatic Kiosk Mode

Enabling this setting allows kiosk applications to launch automatically on startup.

| Enable | Cancel |

11. Click **Enable**, then click **OK**. The Sign in screen appears (see Figure 12).

12. In the Sign in screen, enter the Gmail address you obtained in step 1, click **Next**, enter the password, and click **Next** again.

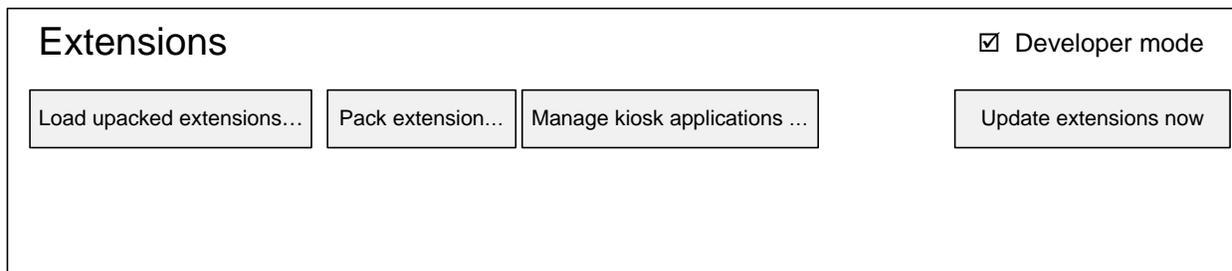13. When you get to the desktop, click the Chrome icon [🌐] to open Chrome.

    a. In the URL bar, enter

        chrome://extensions.

    The Extensions screen appears (see Figure 14).
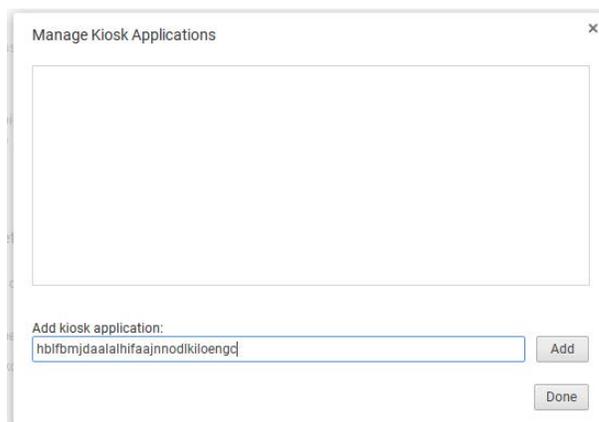
14. Mark the checkbox for **Developer Mode**.

Figure 14. Extensions Screen

Extensions   ☑ Developer mode

| Load upacked extensions… | Pack extension... | Manage kiosk applications ... | | Update extensions now |

15. Click **Manage kiosk applications** located at the top of the screen. The Manage Kiosk Applications screen appears (see [Figure 15](#)).

Figure 15. Manage Kiosk Applications Screen

16. Do the following in the Manage Kiosk Applications screen:

    a. Enter the following into the **Add kiosk application** field:

       `hblfbmjdaalalhifaajnnodlkiloengc`

    b. Click **Add**. The AIRSecureTest application appears in the Manage Kiosk Applications list.

    c. Click **Done**.

17. Click your avatar in the lower-right corner, and then click **Sign Out**.

18. Back at the desktop, click **Apps** at the bottom of the screen, then click **AIRSecureTest**. The secure browser launches.

19. If you receive the following error message, then the secure browser is not configured to run in kiosk mode.

    `The AIRSecureTest application requires kiosk mode to be enabled.`

    You need to re-install the app in kiosk mode by restarting this procedure.

20. Configure the test administration by following the procedure in the section [Opening the AIRSecureTest Mobile App and Selecting the Assessment Program](#).

Installing the AIRSecureTest Kiosk App on Managed Chromebooks

These instructions are for installing the AIRSecureTest secure browser on domain-managed Chromebook devices. The steps in this procedure assume that your Chromebooks are already managed through the admin console.

AIRSecureTest is not compatible with public sessions.

1. As the Chromebook administrator, log in to your admin console (https://admin.google.com).

2. Navigate to **Device management** > **Chrome management** > **Device settings**.

3. On the *Device settings* page, scroll down to the *Kiosk Settings* section.

4. Click **Manage Kiosk Applications**. The *Kiosk Apps* window appears.

Figure 16. Kiosk Apps Window
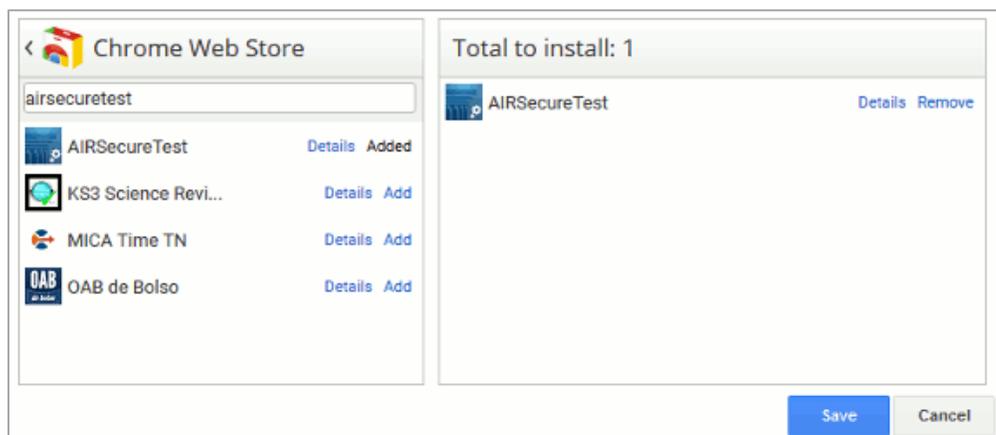
5. If any AIRSecureTest apps appear in the right column, remove them by clicking **Remove**.

6. Add the AIRSecureTest app by doing the following:

    a. Click **Manage Kiosk Applications**. The *Kiosk Apps* window appears.

    b. Click **Chrome Web Store**.

    c. In the search box, enter

            AIRSecureTest

        and press **Enter**. The AIRSecureTest app appears.

    d. Click **Add**. The app appears in the *Total to install* section.

    e. Click **Save**. The AIRSecureTest application appears on all managed Chromebook devices.

Opening the AIRSecureTest Mobile App and Selecting the Assessment Program

The first time you open the AIRSecureTest mobile app, a **Launchpad** appears. This Launchpad establishes the test administration to which your students will log in.

1. Under **Please Select Your State**, select Florida from the drop-down list.

2. Under **Choose Your Assessment Program**, the Florida Standards Assessments should already be selected.

3. Tap or select **OK**. The student login page will load. The secure browser is now ready for students to use.

   The Launchpad appears only once. The student login page appears the next time the secure browser is launched.

Figure 17. Choose Your Assessment Program

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 the section Installing the Secure Browser via Windows for details.

Section IV. Proxy Settings for Desktop Secure Browsers

This section describes the commands for passing proxy settings to the secure browser, as well as how to implement those commands on the desktop computer.

Specifying a Proxy Server to Use with the Secure Browser

By default, the secure browser attempts to detect the settings for your network's web proxy server. You can optionally force the secure browser to use specific proxy settings by passing them through the command line. Table 3 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 3 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 3. Specifying proxy settings using a shortcut or the command line

Description	System	Command
Run the browser without any proxy	Windows	`FSASecureBrowser.exe -proxy 0` aHR0cHM6Ly9mbC50ZHMuYWlyYXN0Lm9yZy9zdHVkZW50
	Mac	`./FSASecureBrowser -proxy 0` aHR0cHM6Ly9mbC50ZHMuYWlyYXN0Lm9yZy9zdHVkZW50
	Linux	`./FSASecureBrowser.sh -proxy 0` aHR0cHM6Ly9mbC50ZHMuYWlyYXN0Lm9yZy9zdHVkZW50
Set the proxy for HTTP requests only	Windows	`FSASecureBrowser.exe -proxy 1:http:foo.com:80` aHR0cHM6Ly9mbC50ZHMuYWlyYXN0Lm9yZy9zdHVkZW50
	Mac	`./FSASecureBrowser -proxy 1:http:foo.com:80` aHR0cHM6Ly9mbC50ZHMuYWlyYXN0Lm9yZy9zdHVkZW50
	Linux	`./FSASecureBrowser.sh -proxy 1:http:foo.com:80` aHR0cHM6Ly9mbC50ZHMuYWlyYXN0Lm9yZy9zdHVkZW50
Set the proxy for all protocols to mimic the "Use this proxy server for all protocols" of Firefox	Windows	`FSASecureBrowser.exe -proxy 1:*:foo.com:80` aHR0cHM6Ly9mbC50ZHMuYWlyYXN0Lm9yZy9zdHVkZW50
	Mac	`./FSASecureBrowser -proxy 1:*:foo.com:80` aHR0cHM6Ly9mbC50ZHMuYWlyYXN0Lm9yZy9zdHVkZW50
	Linux	`./FSASecureBrowser.sh -proxy 1:*:foo.com:80` aHR0cHM6Ly9mbC50ZHMuYWlyYXN0Lm9yZy9zdHVkZW50

Description	System	Command
Specify the URL of the PAC file	Windows	`FSASecureBrowser.exe -proxy 2:proxy.com` `aHR0cHM6Ly9mbC50ZHMuYWlyYXN0Lm9yZy9zdHVkZW50`
	Mac	`./FSASecureBrowser -proxy 2:proxy.com` `aHR0cHM6Ly9mbC50ZHMuYWlyYXN0Lm9yZy9zdHVkZW50`
	Linux	`./FSASecureBrowser.sh -proxy 2:proxy.com` `aHR0cHM6Ly9mbC50ZHMuYWlyYXN0Lm9yZy9zdHVkZW50`
Auto-detect proxy settings	Windows	`FSASecureBrowser.exe -proxy 4` `aHR0cHM6Ly9mbC50ZHMuYWlyYXN0Lm9yZy9zdHVkZW50`
	Mac	`./FSASecureBrowser -proxy 4` `aHR0cHM6Ly9mbC50ZHMuYWlyYXN0Lm9yZy9zdHVkZW50`
	Linux	`./FSASecureBrowser.sh -proxy 4` `aHR0cHM6Ly9mbC50ZHMuYWlyYXN0Lm9yZy9zdHVkZW50`
Use the system proxy setting (default)	Windows	`FSASecureBrowser.exe -proxy 5` `aHR0cHM6Ly9mbC50ZHMuYWlyYXN0Lm9yZy9zdHVkZW50`
	Mac	`./FSASecureBrowser -proxy 5` `aHR0cHM6Ly9mbC50ZHMuYWlyYXN0Lm9yZy9zdHVkZW50`
	Linux	`./FSASecureBrowser.sh -proxy 5` `aHR0cHM6Ly9mbC50ZHMuYWlyYXN0Lm9yZy9zdHVkZW50`

Modifying Desktop Shortcuts to Include Proxy Settings

This section provides guidelines for passing a proxy setting to the secure browser. All commands in this section are examples only, with the assumption that you have a shortcut for the secure browser on your desktop.

Modifying Desktop Shortcuts on Microsoft Windows

1. Right-click the desktop shortcut for the secure browser, and select **Properties**.

2. Click the **Shortcut** tab.

3. If the **Target** field is disabled, do the following (otherwise skip to step 4):

    a. Close the Properties dialog box, and delete the desktop shortcut for the secure browser.

    b. Create a new desktop shortcut. In the Windows Explorer, navigate to

        `C:\Program Files (x86)\FSASecureBrowser\.`

    Right-click the file

        `FSASecureBrowser.exe,`

and select

```
Send To > Desktop (create shortcut).
```

c. Right-click the desktop shortcut for the secure browser, and select **Properties**.

d. Click the **Shortcut** tab.

4. In the **Target** field, modify the command as specified in [Table 3](). For example:

```
"C:\Program Files (x86)\FSASecureBrowser\FSASecureBrowser.exe" -proxy
1:http:foo.com:80
```

5. Click **OK**.

Modifying Desktop Shortcuts on Mac OS X

The steps in this section require you to use terminal and a text editor.

1. Open Terminal by selecting **Applications > Utilities > Terminal**.

2. Change to the desktop directory

```
cd ~/Desktop
```

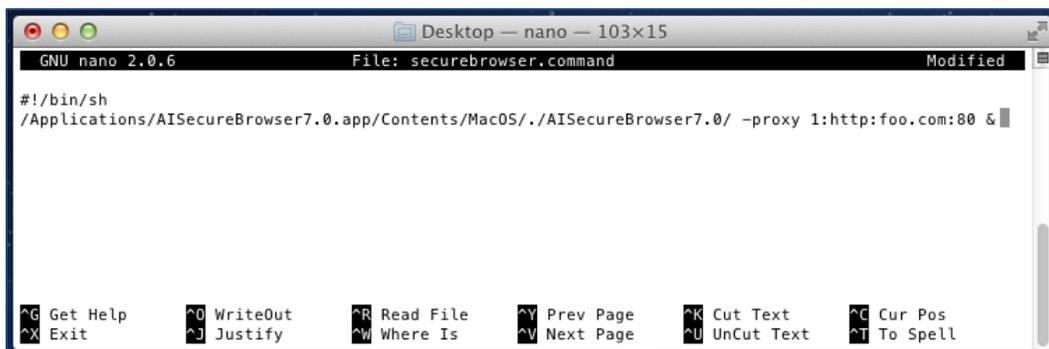3. Create a file `securebrowser.command` on the desktop using a text editor such as Pico.

```
pico securebrowser.command.
```

4. Copy or type the following the lines:

```
#!/bin/sh
/Applications/FSASecureBrowser.app/Contents/MacOS/./ FSASecureBrowser -proxy
1:http:foo.com:80 &
```

Be sure to specify the complete path to the secure browser and the desired proxy option. Ensure the command ends with an ampersand (&).

Figure 18. Sample Mac 10.7.5 Command

5. Save the file and exit the editor by pressing **Ctrl-O**, **Enter** and **Ctrl-X**.

6. Apply execute permission to the file. In Terminal, type

```
chmod a+x securebrowser.command
```

7. Close Terminal.

8. Click the `securebrowser.command` icon on the desktop. The secure browser opens with the proxy setting you configured.

Appendix A. Creating Group Policy Objects

Many of the procedures in the section Installing the Secure Browser on Windows 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 "Assign user logon scripts" at 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 `gpedit.msc`. The Local Group Policy Editor appears.
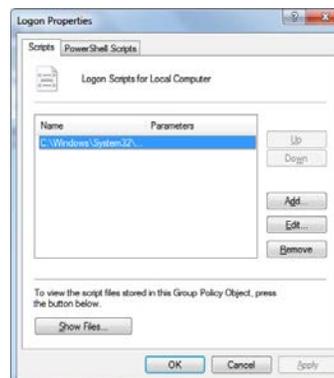
Figure 19. Local Group Policy Editor
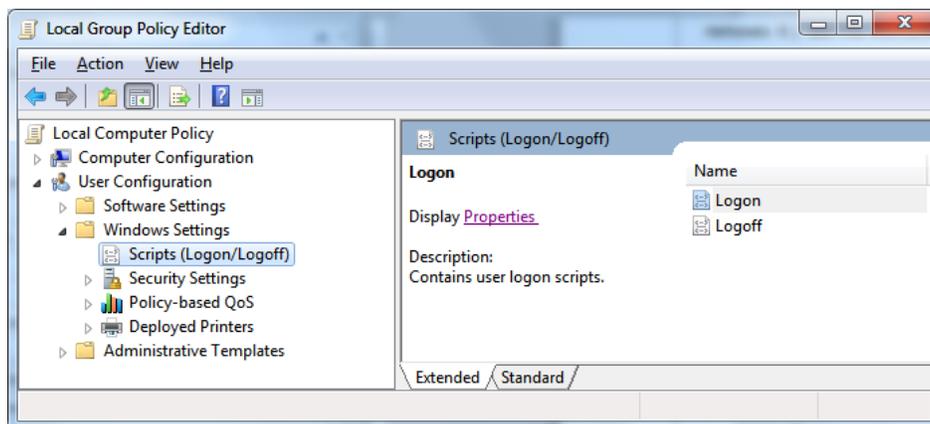
2. Expand **Local Computer Policy > User Configuration > Windows Settings > Scripts (Logon/Logoff)**.
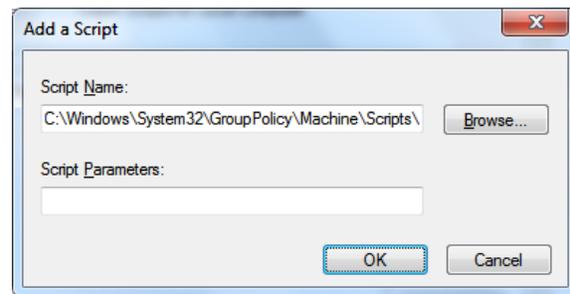
3. Select **Logon** and click **Properties**. The Logon Properties dialog box appears.

Figure 19. Logon Properties Screen

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

Figure 20. Add a Script Screen

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

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

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

8.   Close the Local Group Policy Editor.

Appendix B. Resetting Secure Browser Profiles

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

Resetting Profiles on Windows 7 and Later

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\`

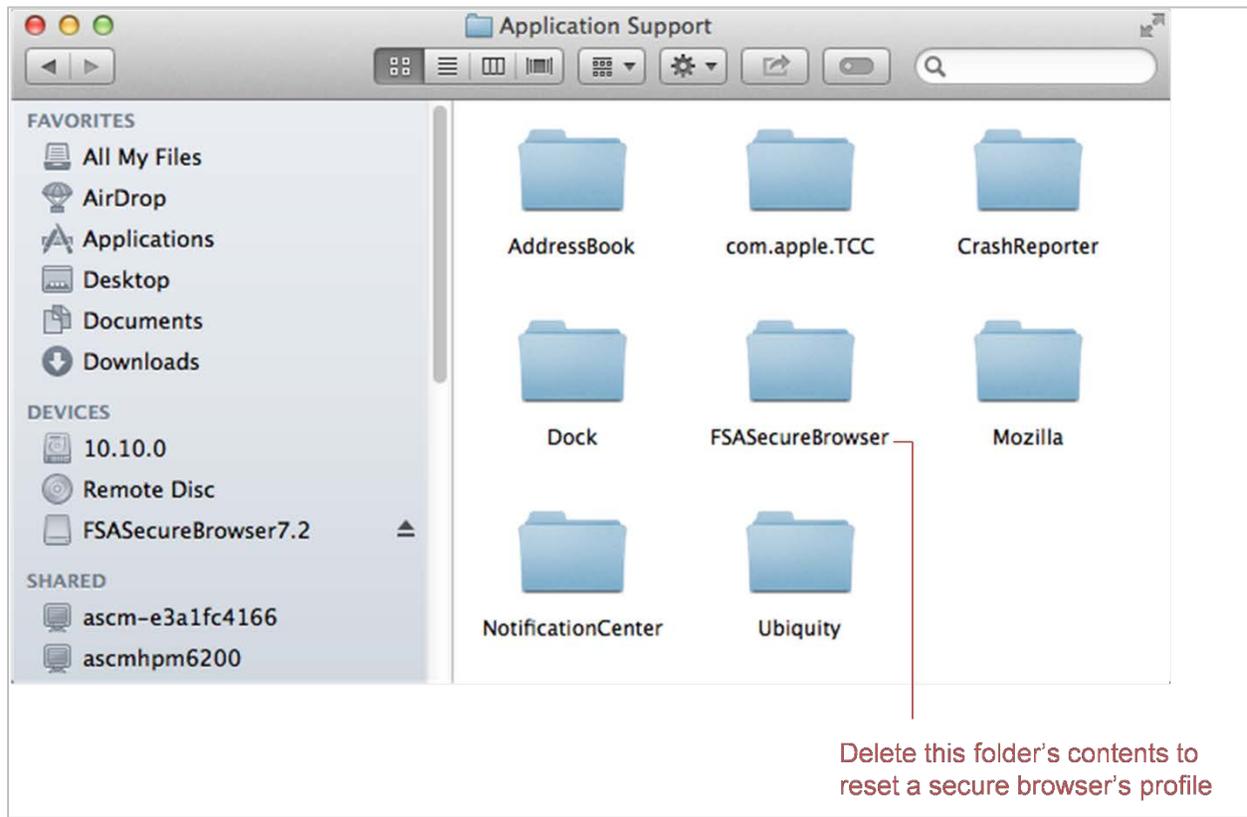   `C:\Users\username\AppData\Roaming\AIR\`

   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.

Resetting Secure Browser Profiles on OS X 10.9 or Later

1. Log on as an admin user or as the user who installed the secure browser, and close any open secure browsers.

2. Start Finder.

3. While pressing **Option**, select **Go > Library**. The contents of the Library folder appear. See [Figure 22](#).

4. Open the **Application Support** folder, and delete the folder containing the secure browser.

5. Returning to the Library, open the **Caches** folder, and delete the secure browser's folder.

6. Restart the secure browser.

Figure 21. Cleaning Secure Browser on OS X 10.9 or Later

Resetting Secure Browser Profiles on Linux

1. Log on as a superuser or as the user who installed the secure browser, and close any open secure browsers.

2. Open a terminal, and delete the contents of the following directories:

    a. `/home/username/.air`

    b. `/home/username/.cache/air`

    In the folders listed above, `username` is the user account where the secure browser is installed. (Keep the directories, just delete their contents.)

3. Restart the secure browser.

Appendix C. User Support

If this document does not answer your questions, please contact the FSA Help Desk.

The Help Desk is open Monday–Friday from 7:00 a.m. to 8:30 p.m. Eastern Time (except holidays or as otherwise indicated on the FSA Portal).

> **Florida Standards Assessments Help Desk**
>
> Toll-Free Phone Support: 1-866-815-7246
>
> Email Support: fsahelpdesk@air.org

In order to help us effectively assist you with your issue or question, please be ready to provide the FSA Help Desk with detailed information that may include the following:

- Test Administrator name and IT/network contact person and contact information

- Device, operating system, and browser version information

- Any error messages and codes that appeared, if applicable

- Information about your network configuration:

    o Secure browser installation (to individual machines or network)

    o Wired or wireless Internet network setup

Appendix D. Change Log

Location	Change	Date