# CALIFORNIA
Assessment of Student Performance and Progress

Technical Specifications and Configuration Guide for CAASPP Online Testing

◈ System Requirements ◈
Network Configuration ◈ System Configuration ◈
Secure Browser Configuration ◈

Summative and Interim Assessments
Test Administrator Sites
Student Practice Tests
Test Operations Management System
Online Reporting System
Interim Assessment Hand Scoring System

ETS®

caaspp
California Assessment of
Student Performance and Progress

DEPARTMENT OF EDUCATION · STATE OF CALIFORNIA
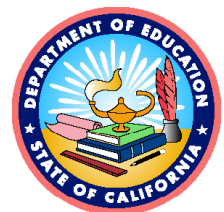
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Appendixes

Appendix A. Operating System Support Plan for the 2016–17 Test Delivery System

A supported operating system is one for which American Institutes for Research (AIR) provides updates to the secure browser for that operating system. AIR provides such updates as the supported operating systems are updated or as bugs in the secure browser are detected and fixed.

The support plan describes AIR's plan for supporting operating systems during the upcoming test administration and following years. This plan helps local educational agencies (LEAs) and schools manage operating system deployments based on the support timelines. The following are the operating systems that will not be supported after the 2016–17 CAASPP administration:

- Windows Vista
- Linux openSUSE 13.1

There are two parts to the support plan: the Timing of Secure Browser Updates subsection, and the Supported Operating Systems table.

Timing of Secure Browser Updates

A "major version upgrade" of an operating system is usually denoted by an increase in the version designation's whole number. For example, the upgrade from Windows 8 to Windows 10 is a major version upgrade. For major version upgrades to a device operating system released before May 1, AIR will provide a secure browser update for that operating system version for the upcoming school year. For example, if an upgrade is released in April 2016, AIR will provide a secure browser that works on that upgrade for the 2016–17 school year.

For major version upgrades to a device operating system released after May 1, AIR will not provide a secure browser update until the following school year, and the existing secure browser may or may not be compatible with the upgrade. For example, if an upgrade is released in June 2016, AIR will not provide a secure browser that works on that upgrade until the 2017–18 school year. Exceptions may be made on a case-by-case basis.

A "minor version upgrade" is usually denoted by an increase in a number after a decimal point. For example, the upgrade from Mac OS 10.1 to 10.2 is a minor version upgrade. For minor version upgrades to iOS, Android, or Chrome operating systems, AIR will provide mobile secure browser updates to ensure compatibility.

Support Plan for Operating Systems

Table 17 lists the operating systems and the anticipated end-of-support dates. The shaded cells in Table 17 indicate the following:

- Light (yellow) shading—AIR ends support for operating systems after the 2016–17 school year.
- Dark (gray) shading—AIR ends support for operating systems after the 2017–18 school year.

Table 17. Supported Operating Systems

Supported Operating Systems	Release Date	Anticipated End-of-Support Date	Notes
Windows[a]			
Vista	Jan. 2007	End of 2016–17 School Year	AIR's support for a Windows operating systems ends 10 school years after its release date. For the most part, this coincides with Microsoft's official end-of-life policies for its operating systems.
7	Oct. 2009	End of 2019–20 School Year	
8.0, 8.1	Oct. 2012	End of 2021–22 School Year	
10	Jul. 2015	End of 2025–26 School Year	
11[b]	Pending	End of 2025–26 School Year	
Server 2008	Oct. 2009	End of 2018–19 School Year	
Server 2012	April 2012	End of 2021–22 School Year	
Mac OS X (Intel)[a]			
10.7	July 2011	End of 2020–21 School Year	Mac OS X computers with PowerPC processors are not supported. Apple does not document end-of-life status for its products. AIR recommends using the most recent releases. AIR support for a given version of OS X ends 10 school years after its release date.
10.8	July 2012	End of 2021–22 School Year	
10.9	Oct. 2013	End of 2022–23 School Year	
10.10	Oct. 2014	End of 2023–24 School Year	
10.11	Oct. 2015	End of 2024–25 School Year	
10.12[b]	Pending	End of 2025–26 School Year	
Linux[c]			
Fedora 23	Nov. 2015	End of 2018–19 School Year	Official Fedora support typically ends one to two years after a release.
Fedora 24	June 2016	End of 2019–20 School Year	
Fedora 25	Nov. 2016	End of 2019–20 School Year	
openSUSE 13.1	Nov. 2013	End of 2016–17 School Year	Official openSUSE 13.1 support ends November 2016.
openSUSE 13.2	Pending	End of 2017–18 School Year	Official openSUSE 13.2 support ends mid-2017.
Red Hat Enterprise 6.5	Nov. 2013	End of 2020–21 School Year	Official Red Hat Enterprise 6.5 support ends November 2020.
Ubuntu 12.04 (LTS) Ubuntu 14.04 (LTS)	April 2014	End of 2018–19 School Year	Ubuntu typically supports long term support (LTS) distributions for five years after a release.
Ubuntu 16.04 (LTS)	April 2016	End of 2020–21 School Year	
iOS			
8.0–8.2	Sept. 2014	Apple iOS operating systems are released on a rolling basis. AIR supports the three	Supported iPads: • iPad 2 • iPad 3
9.2–9.3	Jan. 2016		

Supported Operating Systems	Release Date	Anticipated End-of-Support Date	Notes
10.0[b]	Fall 2016	most recent major releases of iOS (8–10).	• 4th Generation (Retina display) • iPad Air
Android			
4.4	Oct. 2012	Android operating systems are released on a rolling basis. AIR supports the three most recent minor releases of Android.	Supported tablets: • Google Nexus 10 • Motorola Xoom • Samsung Galaxy Note (2014 edition) • Samsung Tab 3 and 4 • LearnPad Quarto
5.0 (Lollipop)–6.0 (Marshmallow)[d]	Nov. 2014; rolling		
Chrome OS			
51 and up	Jan. 2016; rolling	For a given school year, AIR supports the version of Chrome OS available at the start of that school year and any subsequent version. For example if Chrome OS version 51 is available at the start of school year 2016–17, AIR supports that version and any other version released during that school year.	Google releases new versions of Chrome OS every six weeks. Support may require updating the Chrome kiosk application.

[a] If Microsoft or Apple ends support for an operating system sooner than 10 years after its release, then AIR will stop supporting that system after one full school year.

[b] Support for this version depends on its availability at the start of the school year.

[c] For Linux distributions, AIR will end support at the end of the school year after the official distributor's announced end-of-life support date.

[d] AIR will possibly support Android OS 6.0 (Marshmallow), depending on the release schedule.

Appendix B. URLs for Testing Systems

This appendix presents information about the URLs for California Assessment of Student Performance and Progress (CAASPP) testing. Ensure your network's firewalls are open for these URLs.

URLs for Nontesting Sites

Table 18 lists URLs for nontesting sites, such as the Test Information Distribution Engine (TIDE), Online Reporting System (ORS), and Learning Point Navigator.

> **Note:** The Single Sign On System, which allows users to access using one user name and password, provides access to the following systems (although the type of access is determined by the user role):
> - Test Operations Management System (TOMS)
> - ORS
> - Test Administrator Interface
> - TIDE (used to file appeals)
> - Interim Assessment Hand Scoring System (for interim assessments)

Table 18. URLs for Nontesting Sites

System	URL
CAASPP Portal	http://www.caaspp.org/
Secure browser installation files	http://ca.browsers.airast.org/
TOMS	https://caaspp.ets.org/
Single Sign On System	(The full URL varies by system such as TOMS or the Test Administrator Interface.)

URLs for Testing Sites

Testing sites provide test items as well as support services such as dictionaries and thesauruses.

Test Administrator and Student Testing Web Sites

Testing servers and satellites may be added or modified during the school year to ensure an optimal testing experience. As a result, you are strongly encouraged to whitelist at the root level. This requires using a wildcard.

Table 19. URLs for Testing Web Sites

System	URL
Test Administrator and Student Testing Sites Assessment Viewing Application	*.airast.org *.tds.airast.org *.cloud1.tds.airast.org *.cloud2.tds.airast.org

Online Dictionary and Thesaurus

Some online assessments contain an embedded dictionary and thesaurus provided by Merriam-Webster. The Merriam-Webster URLs listed in Table 20 should also be whitelisted to ensure that students can use them during testing.

Table 20. URLs for Online Dictionary and Thesaurus

Domain Name	IP Address
media.merriam-webster.com	64.124.231.250
www.dictionaryapi.com	64.124.231.250

Appendix C. Technology Coordinator Checklist

This checklist can be printed out and referred to during review of networks and devices used for testing.

	Activity	Estimated Time to Complete	Target Completion Date	Reference
☐	Verify that all of your school's devices that will be used for online testing meet the operating system requirements.	5–10 hours	3–4 weeks before testing begins in your school	Chapter 1, System Requirements
☐	Verify that your school's network and Internet are properly configured for testing, conduct network diagnostics, and resolve any issues.	5–10 hours	3–4 weeks before testing begins in your school	Chapter 2, Network Configuration
☐	Confirm that URLs for testing sites and the online dictionary and thesaurus have been whitelisted on your server.	30 minutes	3–4 weeks before testing begins in your school	Appendix B, URLs for Testing Sites
☐	Verify that auto updating for all software installed on testing devices has either been turned off or configured to run before or after school hours or at some other time when testing is not scheduled.	5–10 hours	3–4 weeks before testing begins in your school	Chapter 2, Network Configuration
☐	Install the secure browser on all devices that will be used for testing.	5–10 hours	3–4 weeks before testing begins in your school	Chapter 4, Secure Browser Configuration
☐	Enable pop-up windows and review software requirements for each operating system.	5–10 hours	1–2 weeks before testing begins in your school	Chapter 3, Software Configuration
☐	On **Windows** devices, disable Fast User Switching. If a student can access multiple user accounts on a single device, you are encouraged to disable the Fast User Switching function.	5–10 hours	1–2 weeks before testing begins in your school	Disabling Fast User Switching
☐	On **Mac 10.7–10.12**, disable Spaces in Mission Control.	5–10 hours	1–2 weeks before testing begins in your school	Disabling Spaces
☐	On **iPads**, ensure that Guided Access or Autonomous Single App Mode is enabled and that test administrators know how to activate Guided Access.	5–10 hours	1–2 weeks before testing begins in your school	Configuring for Guided Access on iOS

	Activity	Estimated Time to Complete	Target Completion Date	Reference
☐	On **iOS** devices, ensure that features that might pose a security risk are disabled.	5–10 hours	1–2 weeks before testing begins in your school	Disabling iOS Features
☐	On **Android** tablets, ensure that the secure browser keyboard is enabled.	5–10 hours	1–2 weeks before testing begins in your school	Disabling Android Features

Appendix D. Scheduling Online Testing

Number of Devices and Hours Required to Complete Online Tests

It is recommended that schools arrange their resources to accommodate the number of students who will be testing at the same time for ease of test administration. The Sample Test Scheduling Worksheet below shows how to estimate the number of testing hours needed to administer one testing opportunity.

Note: This worksheet may need to be modified based on your network setup. Technology coordinators may want to work with the California Assessment of Student Performance and Progress test site coordinator to adapt this worksheet as necessary so your school does not risk overloading its wired or wireless network.

Sample Test Scheduling Worksheet

For each school, enter the following for each online test:

Number of devices available for testing at once:

Number of students who need to take the test:

Number of test administrators who need a device:

Estimated number of hours needed per student to complete the test. This estimate should include approximately 15 minutes for students to get set up and logged in as well as the average estimated time to complete the test.

Number of hours that must be scheduled to administer the test: (students + test administrators) x hours ÷ devices =

Example:

- School A has a total of 60 student devices available for testing at once.
- 120 students in grade five will need to take the mathematics assessment.
- Number of hours needed to administer test: 120 students x 1 hour per student ÷ 60 devices = 2 hours (plus 15 minutes for setup).

Appendix E. Creating Group Policy Objects

Many of the procedures in the subsection "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 on. The script itself is saved in a file called `logon.bat`.

> **Tip:** For additional information about creating group policy objects, see "Assign user logon scripts" at https://technet.microsoft.com/en-us/library/cc770908.aspx?f=255&MSPPError=-2147217396.

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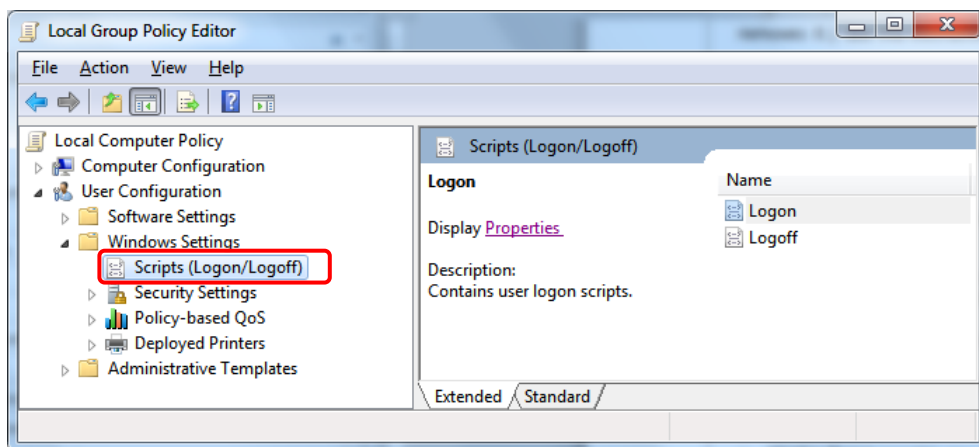

Figure 90. The Local Group Policy Editor

2. Expand *Local Computer Policy → User Configuration → Windows Settings → Scripts (Logon/Logoff)*. This is indicated in Figure 90.

3. Select [**Logon**] and then select [**Properties**]. The Logon Properties dialog box appears.
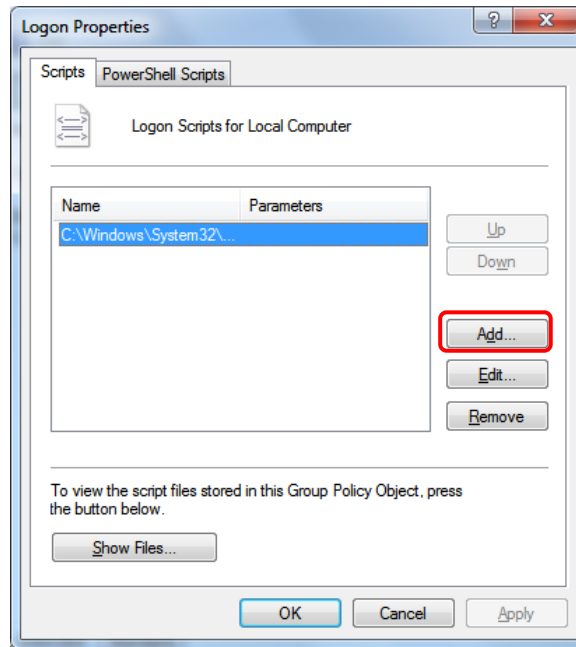
Figure 91. The Logon Properties dialog box

4.   Select [**Add**] (indicated in Figure 91). The Add a Script dialog box appears.

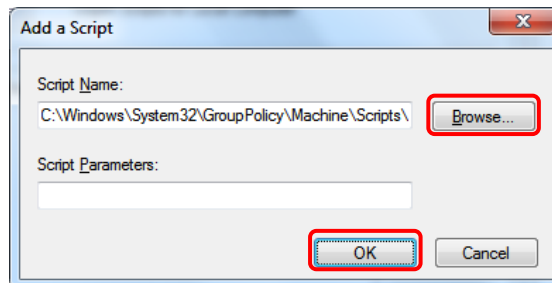**Figure 92. The Add a Script dialog box**

5.   Select [**Browse…**] (indicated in Figure 92) and navigate to the `logon.bat` you want to run.

6.   Select [**OK**] (also indicated in Figure 92) to return to the Logon Properties dialog box.

7.   Select [**OK**] to return to the Local Group Policy Editor.

8.   Close the Local Group Policy Editor.

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Appendix F. Resetting Secure Browser Profiles

If you have been advised to reset the secure browser profile by the California Technical Assistance Center, use the instructions in this section.

Resetting Secure Browser Profiles on Windows

1. Log on 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\`

   `C:\Users\username\AppData\Local\Mozilla\`

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

   where `username` is the Windows user account where the secure browser is installed. (Keep the `AIR\` and `Mozilla\` directories, just delete their contents.)

3. Start the secure browser.

Resetting Secure Browser Profiles on OS X 10.7 or Later

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

2. Start the Finder.

3. While pressing [Option], select *Go → Library*. The contents of the `Library` folder appear (shown in Figure 93).

4. Open the `Application Support` folder.

5. Delete the folder containing the secure browser.

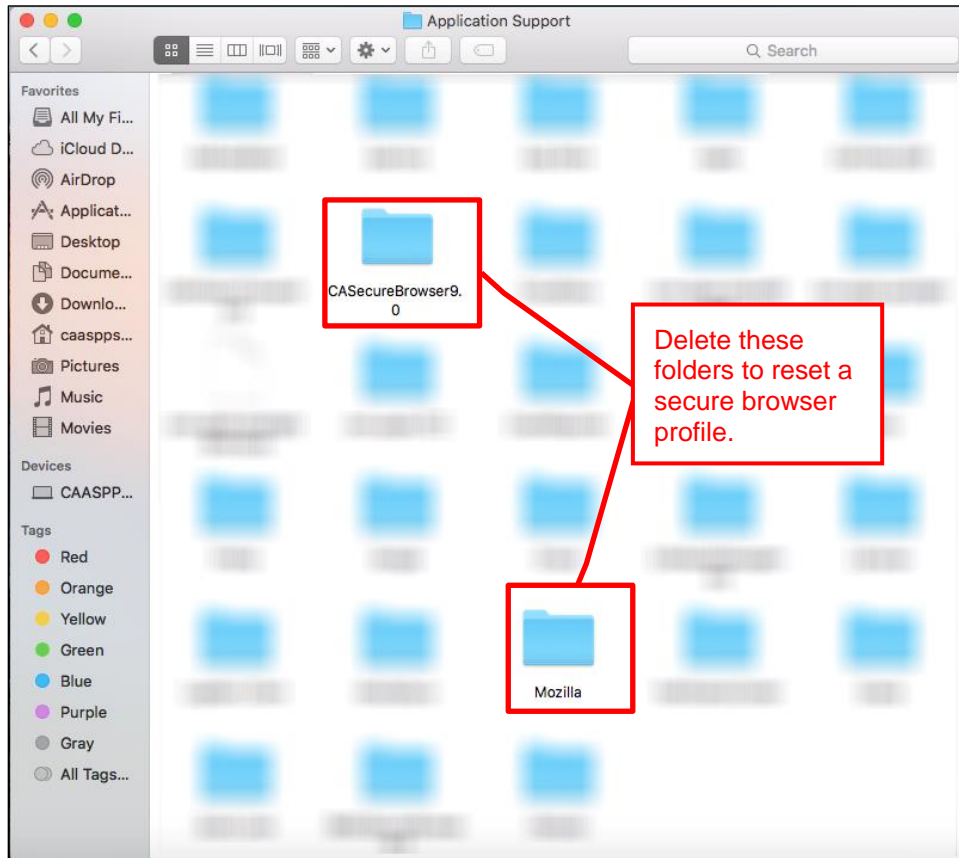6. Delete the `Mozilla` folder.

7. Restart the secure browser.

Figure 93. Resetting secure browser on OS X 10.7 or later

Resetting Secure Browser Profiles on Linux

1. Log on 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 folders:

   `/home/username/.air`

   `/home/username/.mozilla`

   where `username` is the user account where the secure browser is installed. (Keep the `.air/` and `.mozilla/` directories, just delete their contents.)

3. Restart the secure browser.

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Appendix G. User Support

Local educational agency (LEA) California Assessment of Student Performance and Progress (CAASPP) coordinators should first contact your LEA technology coordinator or system administrator prior to contacting the California Technical Assistance Center (CalTAC).

Technology coordinators and CAASPP test site coordinators should contact their LEA CAASPP coordinators for assistance.

California Technical Assistance Center for LEA CAASPP Coordinators

If you must contact CalTAC, you will be asked to provide as much detail as possible about the issue(s) you encountered.

CalTAC

Hours: 7 a.m. to 5 p.m., Monday–Friday

Toll-Free Phone Support: 800-955-2954

E-mail Support: caltac@ets.org

Web site: http://www.caaspp.org/

Always include the following information:

- Test administrator or test examiner name and information technology/network contact person and contact information
- Statewide Student Identifier(s) of affected students
- Results ID for the affected student test session
- Operating system and secure browser version information
- Any error messages and codes that appeared, if applicable
- Information about your network configuration:
    – Secure browser installation (to individual devices or network)
    – Wired or wireless Internet network setup

⚠️ **Warning:** *Never* **provide any other student information, as doing so may violate Family Educational Rights and Privacy Act policies.**