Appendices

CALIFORNIA
Assessment of Student Performance and Progress

Technical Specifications and Configuration Guide for CAASPP Online Testing

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

ETS

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DEPARTMENT OF EDUCATION
STATE OF CALIFORNIA

Appendix A. Operating System Support Plan for the 2018–19 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.

There are two parts to the support plan: the "Timing of Secure Browser Updates" subsection and Table 16, the Supported Operating Systems table.

Timing of Secure Browser Updates

AIR will support major and minor version upgrades for Windows, Macintosh, Linux, iOS, Android, and Chrome OS upon the completion of internal testing following their release. AIR may provide secure browser updates for new major and minor version upgrades of Windows, Macintosh, Linux, iOS, Android, and Chrome OS if necessary.

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.

A "minor version upgrade" is usually denoted by an increase in a number after a decimal point. For example, the upgrade from Mac OS 10.9 to 10.10 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 16 through Table 21 list the operating systems and the anticipated end-of-support dates. The shaded cells in Table 16 and Table 18 indicate that AIR ends support for operating systems after the 2018–19 school year.

Table 16. Supported Operating Systems—Windows

Supported Operating System	Release Date	Anticipated End-of-Support Date
7 SP1 (Professional and Enterprise)	Oct. 2009	End of 2019–20 school year
8 (Professional and Enterprise)	Oct. 2012	End of 2021–22 school year
8.1 (Professional and Enterprise)	Oct. 2013	End of 2022–23 school year
10, 10 in S mode (Educational, Professional, and Enterprise) (Versions 1507–1803 and 1809 upon acceptance)	July 2015	End of 2024–25 school year
Server 2008 R2	Oct. 2009	End of 2019–20 school year
Server 2012 R2	Oct. 2013	End of 2022–23 School Year
Server 2016 R2	Oct. 2016	End of 2025–26 school year

Notes:

- AIR's support for a Windows operating system 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.

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

Table 17. Supported Operating Systems—Mac OS X (Intel)

Supported Operating System	Release Date	Anticipated End-of-Support Date
10.9	Oct. 2013	End of 209–20 school year
10.10	Oct. 2014	End of 2020–21 school year
10.11	Sept. 2015	End of 2021–22 school year
10.12	Sept. 2016	End of 2022–23 school year
10.13	Sept. 2017	End of 2023–24 school year
10.14	Pending acceptance	End of 2024–25 school year

Notes: 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.

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

Table 18. Supported Operating Systems—Linux

Supported Operating System	Release Date	Anticipated End-of-Support Date
Fedora 27 LTS (Gnome)	Nov. 2017	End of 2019–20 school year
Fedora 28 (LTS Gnome)	May 2018	End of 2020–21 school year
Ubuntu 14.04 LTS (Gnome)	April 2014	End of 2018–19 school year
Ubuntu 16.04 LTS (Gnome)	April 2016	End of 2020–21 school year
Ubuntu 18.04 LTS (Gnome)	April 2018	End of 2022–23 school year

Notes:

- Official Fedora support typically ends one to two years after a release.

- Ubuntu typically supports long-term support (LTS) distributions for five years after a release.

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

Table 19. Supported Operating Systems—iOS

Supported Operating System	Release Date	Anticipated End-of-Support Date
10.3	Sept. 2014	Apple iOS operating systems are released on a rolling basis. AIR supports the three most recent major releases of iOS.
11.4	Jan. 2016	Apple iOS operating systems are released on a rolling basis. AIR supports the three most recent major releases of iOS.
12	Pending acceptance	Apple iOS operating systems are released on a rolling basis. AIR supports the three most recent major releases of iOS.

Note: Supported iPads are as follows:

- 4th Generation (retina display)
- 5th Generation (retina display)
- 6th Generation (retina display)
- iPad Air
- iPad Air 2
- iPad Pro

Table 20. Supported Operating Systems—Android

Supported Operating System	Release Date	Anticipated End-of-Support Date
7.1	Aug. 2016; rolling	Android operating systems are released on a rolling basis. AIR supports the three most recent minor releases of Android.
8.1	Aug. 2016; rolling	Android operating systems are released on a rolling basis. AIR supports the three most recent minor releases of Android.
9	Aug. 2016; rolling (Pending acceptance)	Android operating systems are released on a rolling basis. AIR supports the three most recent minor releases of Android.

Notes:

- Android 7.0 has been released but is not yet formally supported, pending its inclusion in the Google for Education program.
- Supported tablets are the Lenovo Yoga Tab 3 10; Samsung Galaxy Tab S3; and Asus ZenPad Z10.

Table 21. Supported Operating Systems—Chrome OS

Supported Operating System	Release Date	Anticipated End-of-Support Date
67 and above	June 2018; rolling	For any given school year, AIR supports the version of Chrome OS available during the summer months and all subsequent versions. For example, if Chrome OS version 67 is released in July, it and all versions of Chrome after it will be supported until July of the following year.

Note: Google releases new versions of Chrome OS every six weeks. Support may require updating the Chrome kiosk application.

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 22 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 username 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 22. URLs for Nontesting Sites

Destination	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.)
SurveyGizmo (This website hosts CAASPP forms and surveys.)	http://www.sgizmo.com http://www.surveygizmo.com http://www.surveygizmo.eu

URLs for Testing Sites

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

Test Administrator and Student Testing Websites

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. URLs for testing websites are listed in Table 23.

Table 23. URLs for Testing Websites

Systems	URLs
• Test Administrator and Student Testing Sites • Assessment Viewing Application	*.airast.org *.tds.airast.org *.cloud1.tds.airast.org *.cloud2.tds.airast.org
• Certificate revocation list	http://crl.verisign.com/

Online Dictionary and Thesaurus

Some online assessments contain an embedded dictionary and thesaurus provided by Merriam-Webster. The Merriam-Webster Internet Protocol (IP) addresses listed in Table 24 also should be whitelisted to ensure that students can use them during testing.

Table 24. 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 Systems
☐	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	Turn Off Background Jobs
☐	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
☐	Review software requirements for each operating system.	5–10 hours	1–2 weeks before testing begins in your school	Chapter 3, Software Configuration

	Activity	Estimated Time to Complete	Target Completion Date	Reference
☐	Enable pop-up windows on student devices.	5–10 hours	1–2 weeks before testing begins in your school	Enabling Pop-Up Windows
☐	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 in Windows
☐	On **Mac devices**, disable Spaces or Exposé in Mission Control.	5–10 hours	1–2 weeks before testing begins in your school	Disabling Exposé or Spaces
☐	On **iPads**, ensure that Automatic Assessment Configuration is enabled.	5–10 hours	1–2 weeks before testing begins in your school	Using Automatic Assessment Configuration
☐	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	Configuring Apple Mobile Devices for Online Testing with the Secure Browser
☐	On **Android** tablets, ensure that the secure browser keyboard is enabled.	5–10 hours	1–2 weeks before testing begins in your school	Configuring Android for Online Testing with the Secure Browser

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 in this appendix 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	Result
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) × 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 × 1 hour per student ÷ 60 devices = 2 hours (plus 15 minutes for setup).

Appendix E. Creating Group Policy Objects to Assign Logon Scripts

> **Additional Resources:**
> - Microsoft IT Pro Center | Create a Group Policy Object (Windows 10, Windows Server 2016) web page—https://docs.microsoft.com/en-us/windows/security/identity-protection/windows-firewall/create-a-group-policy-object
> - Microsoft IT Pro Center | Create and Edit a Group Policy Object web page—https://docs.microsoft.com/en-us/previous-versions/windows/it-pro/windows-server-2008-R2-and-2008/cc754740(v=ws.11)

Some of the procedures in the subsection "Installing the Secure Browser on Windows" refer to creating a group policy object that contains instructions for Windows to execute upon certain events. The procedure in this appendix 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.

1. In the task bar (Windows 10), or in *Start → Run* (previous versions of Windows), enter gpedit.msc and then select the link. The *Local Group Policy Editor* window, shown in Figure 101, appears.
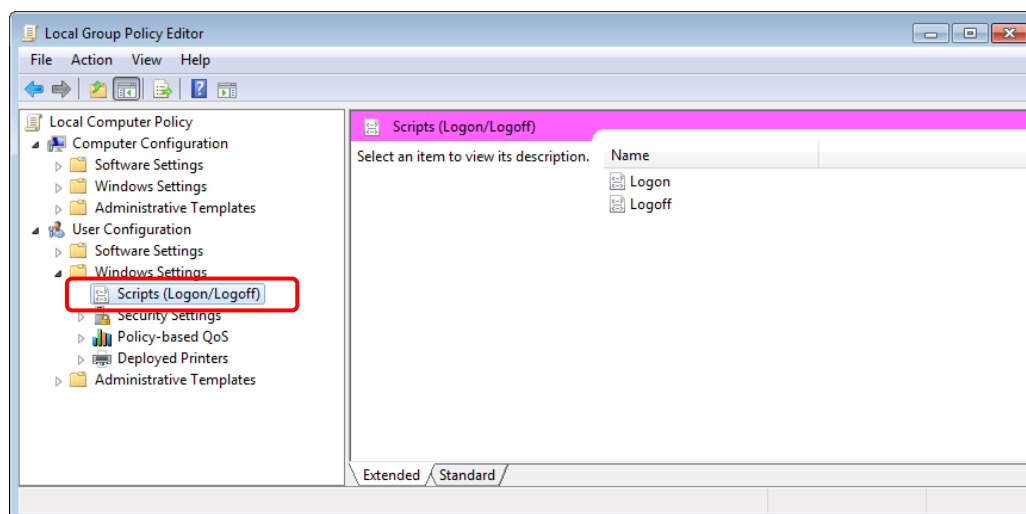

Figure 101. The *Local Group Policy Editor* window

2. Expand *Local Computer Policy → User Configuration → Windows Settings → Scripts (Logon/Logoff)* (indicated in Figure 101).

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

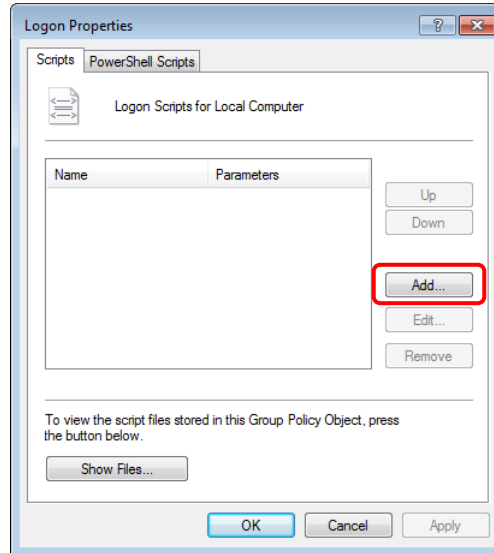4. Select [**Add**] (indicated in Figure 102). The *Add a Script* dialog box appears.

Figure 102. The *Logon Properties* dialog box

5. Select [**Browse…**] (indicated in Figure 103) and navigate to the `logon.bat` you want to run.
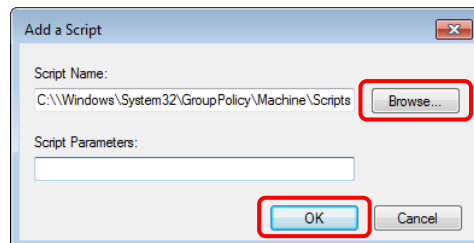

Figure 103. The *Add a Script* dialog box

6. Select [**OK**] (also indicated in Figure 103) 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.

Appendix F. Resetting Secure Browser Profiles

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

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\
    ```

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

3. Start the secure browser.

Resetting Secure Browser Profiles on OS X 10.9 or Later

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

2. Start the Finder.

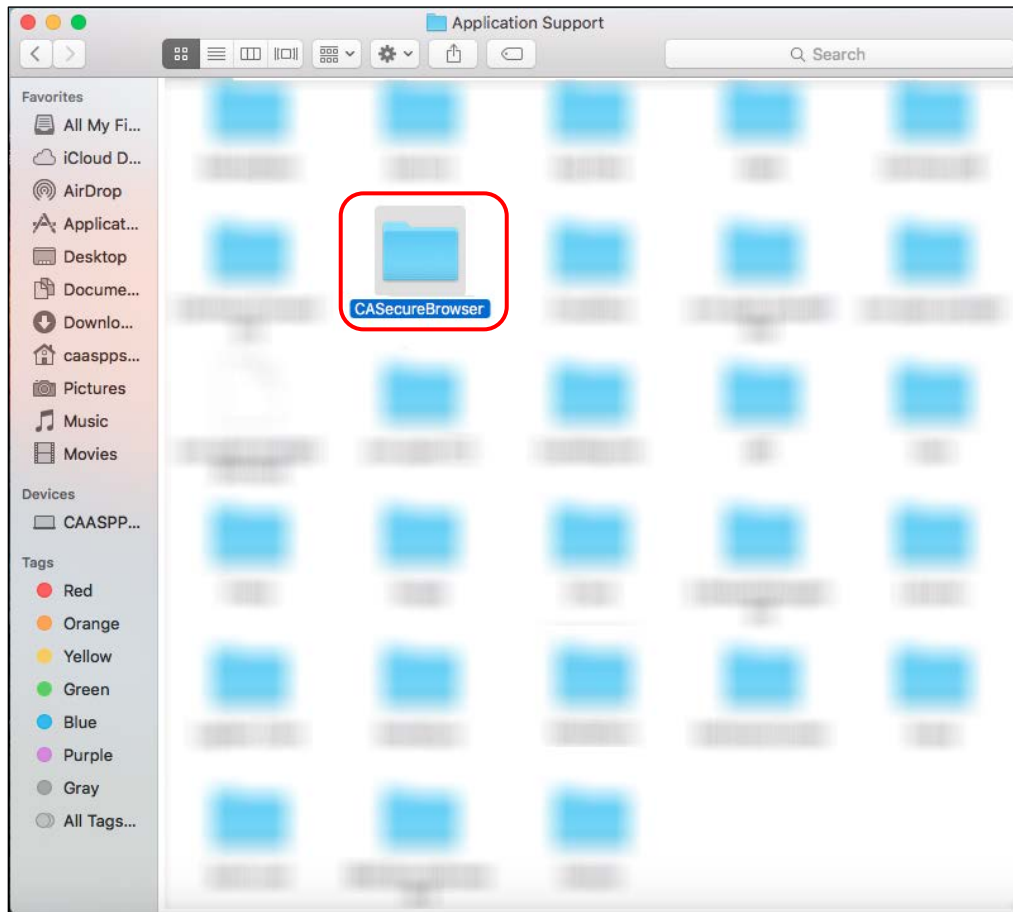3. While pressing [Option], select *Go → Library*. The contents of the `Library` folder appear (shown in Figure 104).

Figure 104. Resetting the secure browser on OS X 10.9 or later

4. Open the `Application Support` folder.

5. Delete the folder containing the secure browser.

6. Restart the secure browser.

Resetting Secure Browser Profiles on Linux

1. Log on as a superuser 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:

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

   where `username` is the user account where the secure browser is installed. (Keep the directories; just delete their contents.)

3. Restart the secure browser.

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
>
> Email Support: caltac@ets.org
>
> Website: 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.

Appendix H. Change Log

Change(s)	Section(s)	Date
[to be determined]	[to be determined]	[to be determined]
[to be determined]	[to be determined]	[to be determined]