

Online assessment technology

External assessment — Safe Exam Browser installation guide

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Introduction

This guide shows how to install, configure and verify the Safe Exam Browser (SEB) on student devices. These three steps must be completed before the online assessment system can be used.

It is essential to uninstall any previous version of SEB from earlier trials.

Device requirements

- ☑ You will need an appropriate electronic device, such as:
 - an Apple Mac computer with OS X
 - a Windows-based computer with Windows 7 (or later).
- ☑ The electronic device must have:
 - an internet connection
 - an operating system and browser combination indicated with a tick (✓) in the table below (previous browser versions are not supported):

Browser	Operating system				
	Windows	OS X	iOS	Android	Chrome
Chrome — latest stable	✓	✓	–	✓	✓
Firefox — latest stable & Extended Support Release (ESR)	✓	✓	–	–	–
Safari 7, 8	–	✓	–	–	–
Internet Explorer 10, 11 (Desktop)	✓	–	–	–	–
Edge — latest stable	✓	–	–	–	–

- ☑ Safe Exam Browser (SEB) uses system proxy settings.
Ensure your system proxy settings are correctly configured.

If your network blocks access to some internet sites — and you can add domains to your proxy filter using wildcards, e.g. *.learnosity.com, — whitelist the following domains:

- ☑ *.learnosity.com
- ☑ dof8gyq4yceq.cloudfront.net
- ☑ dw6y82u65ww8h.cloudfront.net
- ☑ learnositymediaprocessed.s3.amazonaws.com
- ☑ ssl.google-analytics.com

If you cannot add these domains to your proxy filter, contact the Assessment Operations Unit on 1300 381 575 or email seaops@qcaa.qld.edu.au.

What is Safe Exam Browser?

Safe Exam Browser (SEB) opens a web browser window without navigation elements such as address bars or search engine fields and locks the computer into a kiosk mode. This prevents the user from switching to other applications or quitting SEB prematurely.

SEB enables secure assessment on unmanaged computers, such as students' own laptops (BYOD), and facilitates the use of online assessment in managed environments.

SEB uses encrypted .seb configuration files which allow an individually configured SEB for each assessment.

SEB should be installed, configured and verified prior to use by students.

How SEB works on a Windows operating system

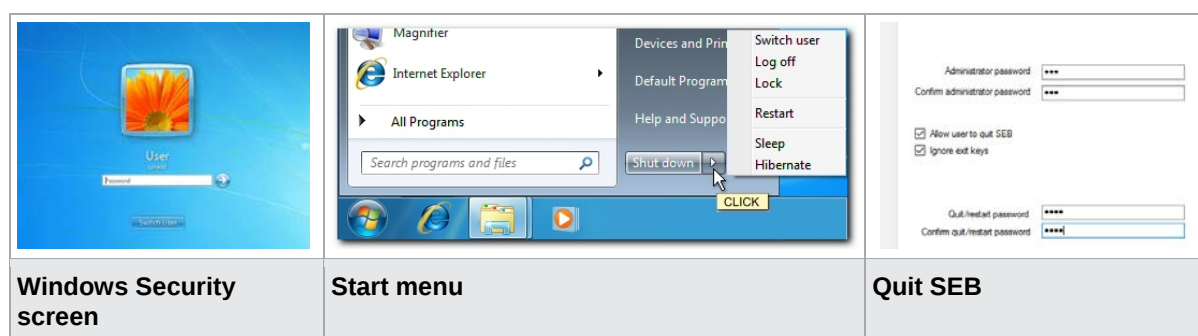
Prevented options

SEB prevents switching to other applications or interrupting an exam.

SEB on a Windows OS *disables*:

- the **Windows Security** screen (**Ctrl+Alt+Del**) options:
 - Lock this Computer, Switch User, Log off, Change a password, Start Task Manager, Shut down and Ease of Access
- the **Start** menu (button in the lower left corner of the screen) with its submenus:
 - Shut down, Undock, Switch user, Log off, Lock, Restart, Sleep, Hibernate, the Task Switcher (**Alt+Tab** and **Windows+Tab**), and printing
- the users' ability to **Quit** SEB (if set up) with or without a required 'quit' password
- the users' ability to right-mouse click (or **Shift+F10**) to make a **pop-up window** available.

SEB on Windows OS — prevented options



Supported options

As long as the required plugins are installed, SEB on Windows OS *continues* to support:

- Quicktime
- Java
- Flash.

How SEB works on a Mac operating system

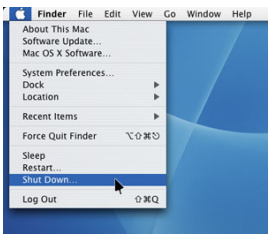
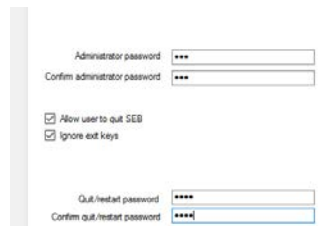
Prevented options

SEB prevents switching to other applications or interrupting an exam.

SEB on a Mac OS *disables*:

- the **OS X Dock**
- the **process switcher** (**Cmd+Tab** and **Cmd+Shift+Tab**)
- the **Apple Menu** and various other items in the menu bar
- the **Force Quit** window (**Cmd+Opt+Esc**), normal reboot (**Ctrl+Cmd+Eject**) and normal shutdown (**Ctrl+Opt+Cmd+Eject**)
- hiding the application, printing, **Exposé**, screenshots and the **Notification Center**
- display and system idle sleep
- the users' ability to **Quit** SEB (if set up) with or without a required 'quit' password
- the users' ability to right-mouse click (or **Ctrl+**) to make a **pop-up window** available:
 - links requesting to open in a separate window can be generally blocked, forced to open in the same browser window, or in a new SEB window.

SEB on Mac OS X — prevented options

		
OS X dock	Apple menu	Quit SEB

Supported options

As long as the required plugins are installed, SEB on a Mac OS *continues* to support:

- Quicktime
- Java
- Flash.

Windows operating system setup

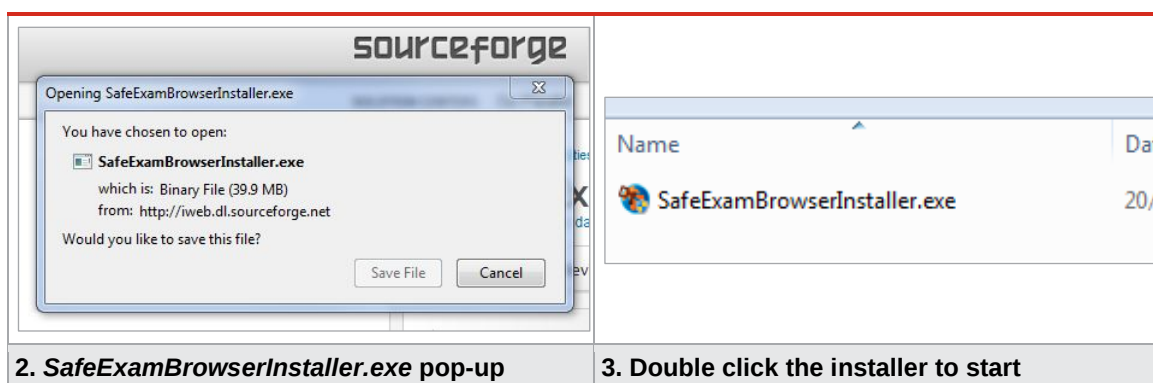
Safe Exam Browser 2.1.3 for Windows 7, 8.1 and 10

The following steps show how an administrator can install, configure and verify the latest version of SEB. Uninstall any previous versions prior to commencing.

Step 1: Install

To install SEB for Windows:

1. Open the following page and click on the link to download Safe Exam Browser 2.1.3 for Windows: <https://www.qcaa.qld.edu.au/safe-exam-browser>
2. On the *SafeExamBrowserInstaller.exe* pop-up, select **Save File** (pictured below left)
3. Double click the **SafeExamBrowserInstaller.exe** to start the installation. (pictured below right.)



Note: Use of the default location is recommended.

For a 32-bit machine, this is: C:\Program Files (x86)\SafeExamBrowser

For a 64-bit machine, this is: C:\Program Files\SafeExamBrowser

4. Follow the installer prompts to complete the installation.

Once installed, the SafeExamBrowser folder contains:

- the application — SafeExamBrowser.exe
- a configuration tool — SebWindowsConfig.exe
(Note: This tool will not be used. See Step 2: Configure).

 In addition, an SEB icon is placed on the desktop.

SEB is now ready to configure.

Step 2: Configure

1. Download the replacement configuration file *SebClientSettings.seb*, from <https://www.qcaa.qld.edu.au/safe-exam-browser>
2. Copy *SebClientSettings.seb* to:

- C:\ProgramData\SafeExamBrowser\

or

- %PROGRAMDATA%\SafeExamBrowser\SebClientSettings.seb
(This option will provide the exact path using the Windows path variable.)

Note: Administrator rights are required to copy the file to the PROGRAMDATA folder.

This security measure prevents students, and users without administration rights, from writing or making changes to the exam computer's default settings.

Step 3: Verify

Verifying the installation is the same process for both Windows and Mac.

See the section of this guide titled [Verify installation — Windows and Mac](#) that follows.

Mac operating system setup

Safe Exam Browser 2.1 for Mac OS X 10.7*, 10.8, 10.9, 10.10 and 10.11

The following steps show how to install, configure and verify the latest version of SEB. Uninstall any previous versions prior to commencing.

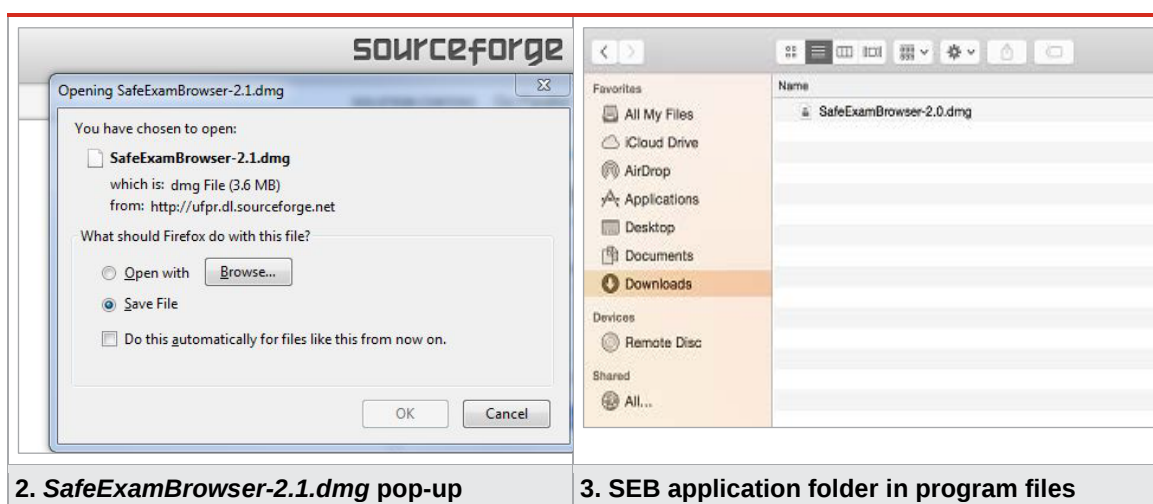
Step 1: Install

To install SEB for Mac OS X:

1. Open the following page and click on the link to download Safe Exam Browser 2.1 for MAC
<https://www.qcaa.qld.edu.au/safe-exam-browser>
2. On the *SafeExamBrowser-2.1.dmg* pop-up, select **Save File** (pictured below left).
3. Click and add the *SafeExamBrowser* to your applications (pictured below right).



An SEB program icon shortcut will be placed on your desktop.



* See *Mac OS X 10.7 note in *Step 2: Configure*

Step 2: Configure

1. Download the replacement configuration file *SebClientSettings.seb*, from <https://www.qcaa.qld.edu.au/safe-exam-browser>
2. Copy *SebClientSettings.seb* into the following directory:

`/Users/<username>/Library/Preferences/`

***Mac OS X 10.7:** In Mac OS x 10.7 the Library folder is no longer displayed in the Finder, you will need to navigate to the Preferences folder.

Type the following path into the **Go to Folder** input field:

`/Users/<username>/Library/Preferences/`

Once installed,  an SEB icon is placed on the desktop.

When started from the icon , SEB checks to see if there is a configuration file named *SebClientSettings.seb* in the Preferences folder (`~/Library/Preferences/`) and reconfigures itself silently, without user feedback, to the settings in that file.

The file is then deleted.

Step 3: Verify

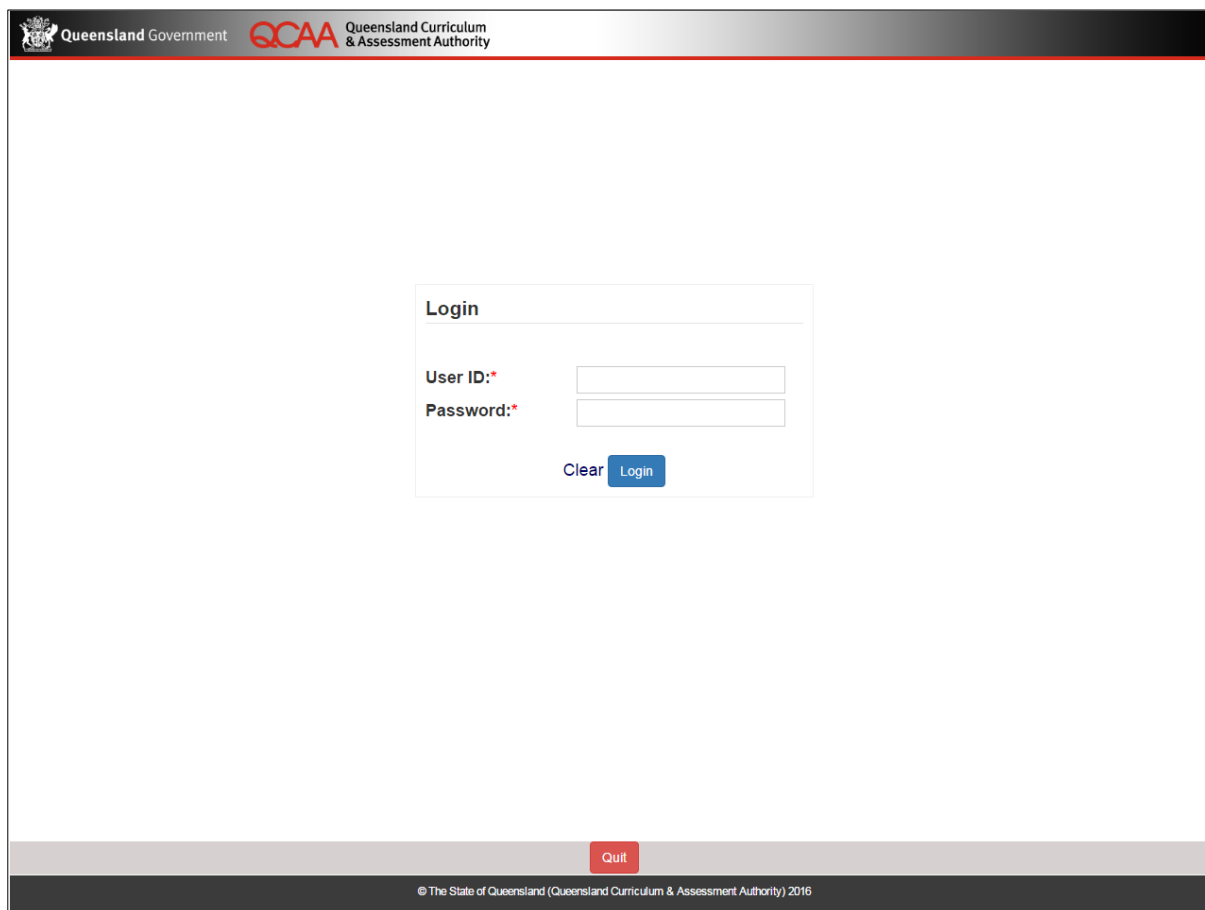
Verifying the installation is the same process for both Windows and Mac.

See the following section of this guide titled [Verify installation — Windows and Mac](#).

Verify installation — Windows and Mac

Launch the Safe Exam Browser using the desktop shortcut .

Ensure SEB disables user actions then opens a browser window showing the Online Assessment application home page.



To complete verification:

1.  Quit the Safe Exam Browser by pressing the red **Quit** button at the bottom of the screen. Do not use other exit options from the browser.
2. Enter the **Quit password**. This will be emailed to SEA Coordinators.

Troubleshooting — Windows

Issue: After launching the Safe Exam Browser, the Login page does not display.

1. If an error message appears:

'The operation timed out when attempting to contact assessment.qcaa.qld.edu.au.'

Possible reason: Your network proxy did not allow the Safe Exam Browser to communicate to the online assessment application.

Action: Contact the Assessment Operations Unit on 1300 381 575 or by email seaops@qcaa.qld.edu.au to fix the proxy settings of Safe Exam Browser.

2. You see a blank screen.

Possible reason: the domains that were listed under the 'Device requirements' section of this document were not whitelisted.

Action: Ensure that these domains are whitelisted:

- ☒ *.learnosity.com
- ☒ dof8gyq4yceq.cloudfront.net
- ☒ dw6y82u65ww8h.cloudfront.net
- ☒ learnositymediaprocessed.s3.amazonaws.com
- ☒ ssl.google-analytics.com

Check the domains are whitelisted correctly.

If the issue persists, contact the Assessment Operations Unit on 1300 381 575 or by email seaops@qcaa.qld.edu.au.

Note: SEB remembers the active settings on the exam client computer before running. SEB automatically resets these settings to the original values when exiting.

Issue: SEB crashes or a user enforces reset

If SEB crashes, or the user enforces a reset of the machine while SEB is running, the original values might not reset.

Action: Reset options to original values. To do this:

1. **Restart** SEB and **Quit** properly using the Quit password.
2. **Uninstall** SEB, then **reinstall** SEB.
3. Reset original values using a command line tool

In the unlikely event that the SEB Windows Service does not work properly or was damaged and cannot be run anymore, there is also a **command line tool**, which can be used to reset the original values.

This tool can be found at the following path in the *Program Files* directory:

SafeExamBrowser\SebWindowsServiceWCF\SebRegistryResetter.exe

You will need to execute this tool as 'Administrator'.

(Right mouse click > Context Menu > **Run as administrator**).

If the original values for the Registry Settings cannot be found, they will be reset to the Windows default values (all enabled). In this case, you will also need to enter the **User name** of the user in which account SEB was running when the problem occurred.

If you were running SEB in your administrator account, the user name you have to enter usually is *not* 'Admin' or similar. Use the **User name of the account**, which has the **Administrator role**. This is the name in the user's home directory (if you go to *C:\Users* in a *Windows Explorer window*, you can see all user account names on the computer).

Troubleshooting — Mac

In the unlikely event that the SEB crashes after starting, reset the local client settings.

Since OS X 10.9 Mavericks, it is **not** possible to reset the original local client settings by just deleting the *org.safeexambrowser.Safe-Exam-Browser.plist* file from the *Preferences* folder, because OS X caches those preferences.

Instead, use the command **defaults delete org.safeexambrowser.Safe-Exam-Browser** from the **Terminal app** shell. You should then be able to **Restart SEB**. When restarting, a message will display indicating the local client settings were reset.

More information

If you need more information, or are having problems installing SEB, please contact the Assessment Operations Unit on 1300 381 575 or by email seaops@qcaa.qld.edu.au.