

Respondus LockDown Browser Guide for Instructors

Introduction

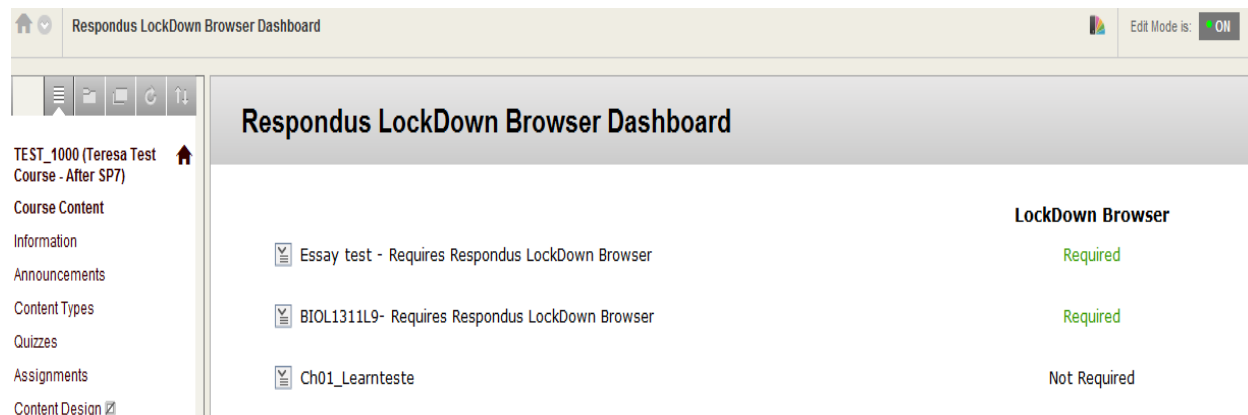
Respondus LockDown Browser™ is a customized browser that increases the security of test delivery in Blackboard. When students use Respondus LockDown Browser to access an exam, they are unable to print, copy, go to another URL, or access other applications. Once an assessment is started, students are locked into it until it's submitted for grading. For a complete list of features, visit the Respondus web site at www.respondus.com. It's also recommended that you view the demonstration movie at <http://www.respondus.com/products/demos-ldb.shtml>.

Respondus LockDown Browser provides a custom interface for the Internet Explorer (Windows) or Safari (Macintosh) software that is already installed on a computer. It does not modify an existing copy of Internet Explorer or Safari, but rather, installs a separate program that displays a custom browser when it is started. Respondus LockDown Browser uses the same security features and service packs that are currently installed for Internet Explorer or Safari. Installing Respondus LockDown Browser won't modify the current version of Internet Explorer or Safari in any way.

Respondus LockDown Browser is not intended to replace the browser used by faculty or students within Blackboard. Respondus LockDown Browser is only intended for use by students while taking assessments that have been prepared for use with Respondus LockDown Browser.

Requiring Respondus LockDown Browser for an Assessment

To require the Respondus LockDown Browser for a test that has already been deployed in your Blackboard course, go to the Control Panel, locate the Course Tools section, and click the link for Respondus LockDown Browser. A list of Blackboard tests that have been deployed in your course will be displayed.



Respondus LockDown Browser Dashboard	
TEST_1000 (Teresa Test Course - After SP7)	Edit Mode is: ON
Course Content	
Information	
Announcements	
Content Types	
Quizzes	
Assignments	
Content Design	
	LockDown Browser
<input checked="" type="checkbox"/> Essay test - Requires Respondus LockDown Browser	Required
<input checked="" type="checkbox"/> BIOL1311L9- Requires Respondus LockDown Browser	Required
<input checked="" type="checkbox"/> Ch01_Learnteste	Not Required

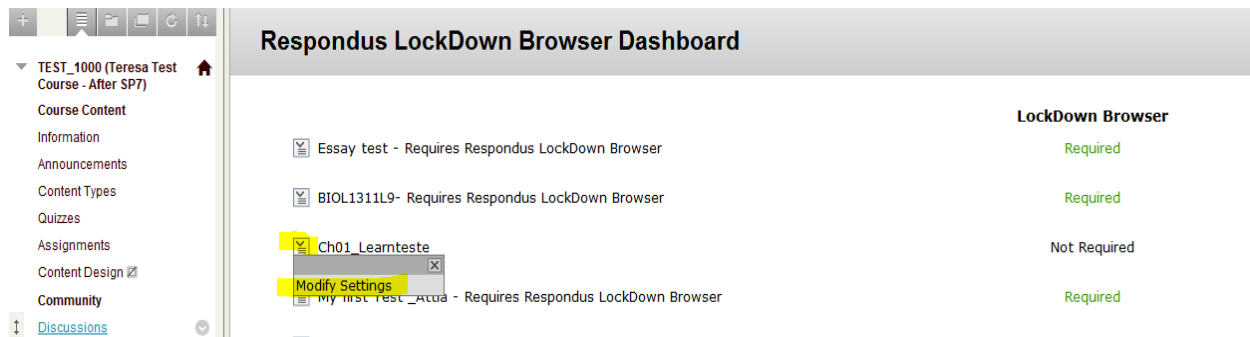
Tests that currently require the use of Respondus LockDown Browser will have their title appended with

“- Requires Respondus LockDown Browser” and show **Required** next to the Settings button.

Tests in the course that don't currently require students to use Respondus LockDown Browser will show **Not Required**.

Follow these steps to enable Respondus LockDown Browser for a test:

1. Click the pull-down menu to the left of the exam name, and select Modify Settings.



2. Select the option for **Require Respondus LockDown Browser for this exam**.

You may set an OPTIONAL password for the proctor or students. **This is a separate password from the automatically-generated password (see #3)**. When you are done setting the Lockdown Browser, click Save and Close button.

3. **NOTE:** The Lockdown Browser will automatically generate a password which appears in the TEST OPTIONS for the exam. See image below.

OFF: The user is given the option to continue after time expires.
ON: Test will save and submit automatically when time expires.

OFF ON

Display After 09/26/2012 01:41 PM
Enter dates as mm/dd/yyyy. Time may be entered in any increment.

Display Until 09/26/2012 01:42 PM
Enter dates as mm/dd/yyyy. Time may be entered in any increment.

Password

Require a password to access this Test.

Password 8d8080c8aa1647

DO NOT uncheck, remove, or change the password or you will break the settings for the Lockdown Browser and compromise the exam. Students do not need this password to enter the exam--this password is only needed to set up the LockDown Browser. (See Additional Explanation for Blackboard Users).

4. At any time, you can turn off the Lockdown Browser by selecting Modify Settings>the option **Don't require Respondus LockDown Browser for this exam**.
5. If you see the word **"Error"** beside the name of the exam in the Lockdown Browser tool, then click on **Fix Settings** to clear the error. Nothing more needs to be done.
6. Click **Submit** to require students to use Respondus LockDown Browser for this test.

An Additional Explanation for Blackboard Users

The "password" feature for a Blackboard assessment is the underlying technology used for the integration with Respondus LockDown Browser.

To prepare a Blackboard assessment so that it requires students to use Respondus LockDown Browser, the Building Block or the Respondus 4 software is used to publish a secret password to Blackboard's "password" field for the assessment. The secret password is derived from a combination of the assessment name (e.g., "Biology Midterm") and a password entered by the instructor (if one is used). For example, if the name of an assessment is "Biology Midterm" and the instructor enters "iodine" as the assessment password, the secret password actually passed to Blackboard by the Building Block or Respondus 4 might be: j4k59Rp*73iw1m.

When a student begins the assessment, Respondus LockDown Browser will ask the student for a password if it is required for the assessment.

If a test password has been specified by the instructor (e.g., "iodine") the student will enter it at this time. Once the password is entered correctly, they will automatically enter the exam.

Important: Instructors should NOT edit the name of the assessment or the proctor password once the assessment has been Enabled with the Building Block or published to Blackboard using Respondus 4. To change the name of the assessment or the password that students enter, follow the instructions above for “Using Respondus 4 to update the settings for an existing assessment in Blackboard...”.

Determining if the LockDown Browser Settings are Set Correctly

To confirm that an assessment will require students to use Respondus LockDown Browser, open a standard web browser, log into Blackboard using a student account, and attempt to start the assessment. You should be unable to start the assessment if everything is set correctly.

Next, start Respondus LockDown Browser (installation instructions appear below), log into Blackboard using a student account, and then start the assessment. If everything is set correctly, you should be able to start the assessment with Respondus LockDown Browser.

Note: If you log into Blackboard as a student and access an assessment with Respondus LockDown Browser, you must “Finish” the assessment before the browser will let you exit.

Additional Tips and Suggestions

Make sure students know well in advance that they must use Respondus LockDown Browser to take an online exam. This is particularly important if students are required to install Respondus LockDown Browser to their own computer. It’s recommended that you create a “practice exam” that requires the use of Respondus LockDown Browser.

It’s a good practice for instructors to preview the exam using Respondus LockDown Browser. The best approach is to log in as a student since instructor logins have different access rights. Previewing an exam is an especially good idea if a test password is being used.

Once a Blackboard Learn assessment is started with Respondus LockDown Browser, the exam will appear in a full-screen window and all other applications and links are locked down. The assessment cannot be exited without clicking the “Finish” button.

If audio/video files are used in an assessment, the media player must be embedded in the question itself. This is the only way that students will have access to the control buttons, such as play, start, pause and stop. (Note that the Macintosh version of LockDown Browser, which uses the Safari engine, doesn't offer the same breadth of support for embedded media. However embedded MP# and QuickTime files will work fine.)

Respondus LockDown Browser will maintain the “locked” testing environment even if a question contains a link to another web page (which opens another, secure browser window). However, all links that may appear on the new web page will be blocked, so be sure the content that students must see is available from the initial, linked page.

For students who have persistent problems with the Lockdown most likely this is problem with their settings. The Lockdown browser is based on the IE and Safari settings, so:

1. make sure IE or Safari is up to date,
2. clear IE or Safari browser cache and cookies,
3. make sure Javascript is enabled

Making Online Exams Even More Secure

Respondus LockDown Browser is an important tool for preventing cheating on online exams, but it’s not a total solution. For example, students working from remote locations could use two computers at once (one for taking the exam, the other for accessing other applications). Students could use digital cameras to capture the screen content, send text messages on mobile phones, or simply refer to printed notes.

Additional methods can be employed that further reduce the risk of cheating and ensure that students know the course material. Each approach below provides another “layer of security.” Even one or two of these items can often provide sufficient security for most assessments.

- Proctors - Having students take an exam in a room being monitored by a proctor is a major deterrent to most forms of cheating. Enhance this method by having the proctor check the identification of the student prior to the start the exam, placing web cameras throughout the room, or using a “test password” (see next item). For distance courses, proctored settings can be established in other cities, even other countries. Because of the time and expense required for a proctored setting, proctors are sometimes used only with high-stake assessments (e.g., midterms, finals).
- Assessment Passwords (Bb setting) - An assessment password prevents students from accessing the exam until a password has been supplied. Assessment passwords can be typed by the proctors themselves (for added security) or conveyed to the student at the start of the assessment.
- Disallow Multiple Attempts (Bb setting) - By only allowing one attempt for an assessment, students won’t be able to determine the questions in the assessment, look up the answers at a later time, and then retake the assessment.
- Limit Initial Feedback to “Score Only” (Bb setting) - Select “Score Only” for the initial Feedback Mode. This will prevent students from viewing, printing or copying questions

after they have completed the exam. Once all students have completed the exam, the Feedback Mode can be changed so that more detailed feedback can be seen by the student. To protect questions for future terms, the “Score Only” setting should only be used.

- Answer Randomization (Bb setting) - Answer choices to multiple choice questions can easily be randomized. This setting is selected at the time a question is created.
- Randomize Questions (Bb setting) - Question randomization is a good deterrent for assessments delivered in a classroom setting. Some versions of Blackboard allow question randomization for an entire assessment to be turned on with a single checkbox. An alternative approach is to create a “random block” which will also display questions in random order.
- Random Blocks (Bb setting) - “Random Blocks” are pools of questions that generally assess similar content. During an assessment, the questions are randomly drawn from the pool so that each student sees a different set of questions. For example, the first question in an exam might be drawn from a pool of 5 questions, making the odds only 1 in 5 that students will see the same question. Random Blocks are ideal for creating alternate forms of the same question.
- Calculated questions - Calculated questions, typically used in math and science courses, include variables in the question wording. The values for these variables are randomly generated, so students encountering the same question must give unique answers.
- Time Limits (Bb setting) - By limiting the time a student can spend on an assessment, students can be discouraged from consulting other sources since they won’t have time to do so.
- Availability Dates and Times (Bb setting) - This setting restricts the availability of the assessment to a specific date/time range.
- Deliver questions one at a time (Bb setting) - By having exam questions delivered one at a time, it makes it more difficult for students to capture the exam contents using a digital camera (e.g., 50 questions requires 50 pictures)
- Code of Conduct - Have students sign an honesty statement that summarizes the expectations and requirements for academic honesty.
- Other methods of assessment - Combine objective tests with other methods of assessment, such as group projects and writing assignments. Essay questions also make it difficult for students to cheat on a traditional assessment, knowing that the instructor may recognize an answer that has been copied from another student.

Advanced Features

A couple of advanced features are available including a calculator, print capability, and spreadsheet viewer (Windows only).

Calculator

Respondus LockDown Browser prevents other applications from being accessed by the student during an assessment, including the “Calculator” tool. However, there are times when an instructor wants to allow students to use an online calculator during an assessment. A calculator option will appear on the toolbar for Respondus LockDown Browser if the following text is placed in the online exam: **{calc}**

The **{calc}** text can appear anywhere in the assessment. If questions are being delivered “one at a time,” the {calculator} text will need to appear in the first question so that it will be available for the remainder of the assessment.

To give students access to a more powerful scientific calculator, enter the text **{scalcalc}** instead of **{calc}**.

Print

Respondus LockDown Browser prevents exam questions from being printed. However, there may be situations where an instructor wants to allow students to print their exam in a lab setting before submitting their answers. This functionality can be enabled in Respondus LockDown Browser, including a print icon on the toolbar, by placing the following text within the online exam: **{prtx}**

The **{prtx}** text can appear anywhere in the assessment. If questions are being delivered “one at a time,” the **{prtx}** text must appear in the first question so that it will be available at any time during the assessment. Note if you want the entire exam printed questions will need to be delivered “all at once” and not “one at a time”.

If the student name and ID is required on the printout, add a 0-point essay or short answer/fill-in-the-blank question where this information is requested of the student.

Note that **{prtx}** should only be used in a lab setting since it allows printing a copy of the exam questions. Also note that the Windows OS allows printing to a file, so it is best if the lab PCs prevents students from copying files to an external source.

Spreadsheet Viewer (Windows only)

Respondus LockDown Browser uses the Internet Explorer plug-ins that are installed on the computer. However, some plug-ins can introduce a security hole because a student may be able to access the Internet using the plug-in. For example, the Excel Viewer plug-in for Internet Explorer allows a user to create a web link and then go to it by clicking on it -- even when

Respondus LockDown Browser is running. But there are times when instructors want students to view an .xls spreadsheet or to have access to a spreadsheet application.

Respondus LockDown Browser offers a secure solution to this issue for Windows users. After a link to an .xls file is added to an exam question, the instructor will need to additionally add the following text one of the questions in the exam (the first question is best) to turn on the spreadsheet viewer in Respondus LockDown Browser: **{sheet}**

When the **{sheet}** text is contained in the assessment, a spreadsheet button will display on the toolbar in LockDown Browser. In addition, when a student clicks on an HTML link that points to an .xls file, it will open the spreadsheet viewer in LockDown Browser instead of the Excel Viewer. (Note: students aren't able to save documents using the LockDown Browser spreadsheet viewer, just access it during the assessment.)