WORKSHOP DESCRIPTION

Overview
How secure are your online exams and quizzes? Reduce the likelihood of students cheating on your assessments by following some best practices to make your online assessments more secure. Topics for this workshop include strategies to minimize cheating, and preventing students from copying and printing your exam questions and results.

Prerequisites
Individuals taking this workshop should have basic computer skills, knowledge of the Web, basic Web browser skills, and the ability to effectively work in the Windows or Macintosh OS environment. In addition, participants must have a SacCT course and a basic understanding of the functions available in SacCT.

Objectives
Participants attending this workshop will:
- Prepare an assessment for use with the LockDown Browser.
- Learn how to install the Respondus LockDown Browser software.
- Take a sample assessment with the LockDown Browser.

INTRODUCTION

Respondus LockDown Browser™ is a customized browser that increases the security of online testing in SacCT. It prevents students from printing, copying, going to another website, or accessing other applications during an assessment. If a SacCT assessment requires that Respondus LockDown Browser be used, the assessment won't be accessible with a standard Web browser. This software works only with Internet Explorer (Windows) and Safari (Macintosh) browsers.

Respondus LockDown Browser should only be used for taking assessments in SacCT. It should not be used in other areas of SacCT or to visit other websites.

TIP: In addition to this document, please visit the ATCS Tools site for Respondus LockDown Browser (http://www.csus.edu/atcs/tools/lockdown-browser/) for more information, such as online tutorials and frequently asked questions.
WHY USE RESPONDUS LOCKDOWN BROWSER?

- Increase security of online quizzes and exams.
- Ensure students are focused on your assessments, and not distracted by other applications.

HOW DOES IT WORK?

Respondus LockDown Browser provides a custom interface for the Internet Explorer (Windows) or Safari (Macintosh) software that is already installed on the 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 your current version of Internet Explorer or Safari in any way.

Accessibility for Students with Disabilities

Due to the limited use of the Alt, Ctrl, Function, and Option keys while Respondus LockDown Browser is running, which limits the functionality of assistive technologies used by students with disabilities, we recommend you NOT require students with disabilities to use Respondus LockDown Browser for assessments. If a student with a disability requiring the use of an assistive technology to access content online is enrolled in your course, you should establish a plan to provide the student an equal alternate form of access to take assessments, such as taking the assessment in the Testing Center and/or creating an alternate assessment that does not have the LockDown Browser restriction.

To learn more about what you can do to make your instructional materials accessible, contact the Instructional Materials Specialist at 278-2847 and visit the Instructional Materials Accessibility Checklist webpage (http://www.csus.edu/accessibility/checklist.html).
GETTING STARTED

There are three main steps to follow for you to utilize the Respondus LockDown Browser:

**step 1.** Prepare an assessment for use with the LockDown Browser by editing the properties of the assessment.

**step 2.** Install the LockDown Browser on your computer.

**step 3.** Take a sample assessment to understand how your students use the software to take an assessment.

Prepare an Assessment for use with LockDown Browser

**step 1.** From the Build or Teach tabs, select the Edit Properties option for the assessment in the ActionLinks menu.

**step 2.** Scroll down and expand the Security Settings area to display all settings.

<table>
<thead>
<tr>
<th>Security Settings</th>
</tr>
</thead>
<tbody>
<tr>
<td>Proctor password:</td>
</tr>
<tr>
<td>Browser Restriction</td>
</tr>
<tr>
<td>IP address: 0 0 0 0</td>
</tr>
<tr>
<td>IP address mask: 0 0 0 0</td>
</tr>
</tbody>
</table>

A Student must enter this password to access the assessment.

Check this box to restrict this assessment so it can only be taken with the Respondus LockDown Browser. [Learn More]

If students' machines must match portions of the specified IP address, in the corresponding IP address mask text boxes, enter 255. If students' machines do not need to match portions of the specified IP address, in the corresponding IP address mask text boxes, enter 0.

**step 3.** Select the checkbox next to Browser Restriction so the assessment can only be used with the Respondus LockDown Browser.

**step 4.** Save your changes to the assessment.

**TIP:** You can use Respondus to set the restriction above. Open your assessment in Respondus and select the “Browser Restriction” setting prior to publishing the assessment to SacCT. From the “Settings” menu in Respondus, select “Security & Submissions” and then select the “Browser Restriction” checkbox.
Install the LockDown Browser

Installation of Browser for Windows

**step 1.** Confirm that you have Internet Explorer version 5.5 or higher already installed on your computer. If you are unsure of the version number, select "Help" from the menu bar in Internet Explorer and then select "About Internet Explorer" to view the version number. NOTE: Internet Explorer is REQUIRED to run the Respondus LockDown Browser software on a Windows computer.

**step 2.** [Download the Respondus LockDown Browser software for Windows](http://www.respondus.com/LDB2/LockDownBrowser.php?instid=649212172). Save the file to your computer’s desktop or My Documents.

**step 3.** Double-click the installation program called "LockDownSFX.exe" where you saved the file from step 2, and follow the onscreen instructions.

**step 4.** Start Respondus LockDown Browser by clicking the shortcut on the desktop. To take an exam or quiz, refer to the steps in *Take an Assessment.*

Installation of Browser for Macintosh

**step 1.** Be sure that you are using OSX 10.3.9 or higher, with 512K RAM as a minimum, and have Safari installed on your computer. NOTE: Safari is REQUIRED to run the Respondus LockDown Browser software on a Macintosh computer.


**step 3.** Click the Install button to begin the installation, and follow the onscreen instructions to complete the installation.

**step 4.** Start Respondus LockDown Browser by clicking "Applications" and selecting "LockDown Browser". To take an exam or quiz, refer to the steps in *Take an Assessment.*

Take an Assessment

To avoid last-minute problems, it’s strongly recommended that Respondus LockDown Browser be installed and tested well before students are expected to use it for an exam. If students are installing Respondus LockDown Browser to their own computers, we suggest that you create a sample quiz where the sole purpose is to confirm whether students have successfully installed the Respondus LockDown Browser and understand how to use it for taking an assessment.
Follow these steps to take an assessment with the LockDown Browser:

**step 1.** Close all programs, unless one is used to connect to the Internet.

**step 2.** Locate the "LockDown Browser" shortcut on the desktop (or from the Start menu) and double-click it for Windows users, or for Macintosh users, launch "LockDown Browser" from the Applications folder.

**step 3.** If prompted to close a blocked program (e.g. instant messaging), choose Yes. If you do not close the blocked program, Respondus LockDown Browser closes. If you are prompted to close another application, but that application is not running, try restarting your computer and then run the Respondus LockDown Browser.

**step 4.** After the program starts, login to SacCT.

**step 5.** Go to your course and navigate to the assessment.

**step 6.** Read the instructions and click **Begin Assessment**. If the **Begin Assessment** button is disabled, it means you are not running Respondus LockDown Browser.

**step 7.** Once an assessment is started, you cannot exit until the **Finish** button is clicked.

If a student attempts to take the assessment using a browser other than Respondus LockDown Browser, a warning message is displayed and the “Begin Assessment” button is dimmed, preventing a student from continuing, as shown below.

**ADDITIONAL TIPS AND SUGGESTIONS**

**Make Your Online Assessments Even More Secure**

Respondus LockDown Browser is an important tool for preventing cheating on online exams, but it’s not a total solution. For best results, view the *Online Exams: Strategies to Minimize Cheating* document.
Advanced Features (Windows only)
A couple of advanced features are available in the Windows version of Respondus LockDown Browser, including a calculator and spreadsheet viewer.

Calculator
Respondus LockDown Browser prevents other applications from being accessed by the student during an assessment, including the “Calculator” tool in Windows. However, there are times when an instructor wants to allow students to use an online calculator during an assessment. A calculator option appears 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 {calc} text must appear in the first question so that it is available for the remainder of the assessment. To give students access to a more powerful scientific calculator, enter the text {scalc} instead of {calc}.

Spreadsheet Viewer
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 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. After a link to an .xls file is added to an exam question, the instructor needs to additionally add the following text to one of the questions in the exam (the first question is best) to turn on the spreadsheet viewer in LockDown Browser: {sheet}

When the {sheet} text is contained in the assessment, a spreadsheet button displays on the toolbar in LockDown Browser. In addition, when a student clicks an HTML link that points to an .xls file, it opens 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.
Create a Sample Assessment for Your Students

Make sure students know, well in advance, that they must use Responds LockDown Browser to take an online assessment. 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 quiz” that requires the use of LockDown Browser.

It's a good practice for instructors to preview the exam using LockDown Browser. This can be accomplished by taking the exam from the Student View tab. Previewing an exam is an especially good idea if a proctor password is being used.

Once a SacCT assessment is started with Respondus LockDown Browser, the assessment appears 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 have access to the control buttons, such as play, start, pause and stop.

Respondus LockDown Browser maintains 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 are blocked by the browser, so be sure the content that students must see is available from the initial, linked page.
RESOURCES

Alternate Formats
For questions regarding provision of instructional materials in alternate formats for students with visual impairments, learning disabilities, or mobility impairments that impact their ability to read printed materials, please contact the Services to Students with Disabilities' High Tech Center at (916)278-7915/htc@csus.edu.
The High-Tech Center Website - http://www.csus.edu/sswd/services/htc.html

Faculty / Staff Resource Center
Located in ARC 3012. Assistance available on walk-in basis.
FSRC Website - http://www.csus.edu/irt/fsrc/

Training & Tools eNewsletter
To receive email notification regarding online seminars, new technology/tools, and other online teaching, technology and learning events, fill out and submit the Training & Tools eNewsletter request form - http://www.csus.edu/atcs/tools/newsletter/request-form-ait-news.stm.

Getting Help
IRT Service Desk
(916) 278-7337 or servicedesk@csus.edu
Academic Technology Consultants
http://www.csus.edu/atcs/contact.htm
1on1 Help @ ATCS on Thursdays 1-4 pm in ARC 3005 (no appointment necessary)
Service Desk - Problem Reports & Contact Information
http://www.csus.edu/irt/servicedesk/contact.html
Training Requests
training@csus.edu

Campus Resources
Training
http://www.csus.edu/training
Training Handouts
http://www.csus.edu/training/handouts
Online Tutorials
http://www.csus.edu/atcs/tools/training/tutorials.stm
Educational Tools
http://www.csus.edu/atcs/tools
Accessibility at Sacramento State
http://www.csus.edu/accessibility