# Using SynchronEyes™ Software with Mobile Devices

With SynchronEyes™ software, you can manage your classroom and communicate with and assist your students without leaving your computer. SynchronEyes software lets you monitor and control your student's computer desktops.

Using SynchronEyes software version 7.0, you can also monitor and interact with your students when they are using mobile devices. After you've established a connection between your computer and a student's mobile device, you can:

- view the mobile device screen
- take control of the mobile device or share control with the student
- broadcast your desktop to the mobile device
- broadcast the mobile device's display to the class or a group
- give the student control of a broadcast from the mobile device
- write notes that appear on the students' mobile device
- lock the mobile device
- include the student in a poll of your class or a group
- capture an image of the student's mobile device screen
- send the student a quiz and receive or collect the student's answers
- transfer files to and from the student

This document explains how to install SynchronEyes software on a mobile device and then connect this device to a teacher's computer. This document also explains some of the differences between how SynchronEyes software interacts with a student's computer and a student's mobile device.

# **Installing SynchronEyes Software**

The SynchronEyes software installation is a two-stage process.

- Install SynchronEyes teacher-station software on your computer.
- Install SynchronEyes student-station software on each student's computer or mobile device.

For information on installing SynchronEyes teacher-station software or installing SynchronEyes student-station software on your computer, see the SynchronEyes software Help.

# Installing SynchronEyes Software on a Student's Mobile Device

You can install SynchronEyes software on a student's mobile device using Microsoft® ActiveSync® software on a connected computer.

You can reconfigure the default settings after installation (page 3).

**NOTE:** If you don't have ActiveSync software, browse to the **StudentSetupWinCE** directory on the SynchronEyes software CD, transfer the **SynchronEyes70SetupWinCE.CAB** file to the mobile device using another file transfer method and run this file on the mobile device.

# To install SynchronEyes software on a mobile device using Microsoft ActiveSync software

1. Connect the student's mobile device to a computer that's running an appropriate version of ActiveSync software.

**NOTE:** For more information, see the instructions you received with the mobile device.

2. On the computer, start ActiveSync software.

**NOTE:** To install SynchronEyes software on more than one mobile device simultaneously, connect multiple mobile devices to the computer. As you connect each mobile device and the *Synchronization Setup Wizard* dialog box appears, click **Cancel** to establish a guest relationship between each mobile device and ActiveSync software.

- 3. Insert the SynchronEyes software CD in the computer.
- 4. On most computers, the CD starts automatically and the *SynchronEyes Classroom Management Software* dialog box appears.
  - If the dialog box appears, click Install and then select Student Program Install For Mobile Devices.
  - If the dialog box doesn't appear, browse to the StudentSetupWinCE directory and double-click SynchronEyes70SetupWinCE.exe.

As SynchronEyes software is installed on the computer, ActiveSync software installs it automatically on the mobile device.

If the software doesn't install automatically on the mobile device, install the software as follows:

- i. In ActiveSync software, select **Tools > Add/Remove programs**.
- ii. Select SMART Technologies Inc. SynchronEyes Student WinCE and click OK.

# **Reconfiguring Student Options on a Mobile Device**

You can reconfigure the student options of a SynchronEyes software installation on a mobile device.

## To reconfigure the installation options

- 1. Using the mobile device, navigate to the Start menu and click SynchronEyes Student 7.0.
- Click the SynchronEyes icon in the lower right of the screen.
- Select Configure.
- 4. On each page of the *SynchronEyes Student Configuration* dialog box, select the options you want. To move between pages, press a tab or a left or right arrow.

The following pages include further information on the options.

#### **Connection Style**

You can set up the student connection to work in one of three ways:

#### Allow Students to Browse for and Connect to Teachers

If you select this option, the students must connect to the appropriate Teacher ID at the start of each class. The advantage of this option is that students are not restricted to only one Teacher ID. It's your students' responsibility to connect to the correct Teacher ID.

#### **Accept Connection from a Teacher**

If you select this option, you connect to the students for your class by instructing SynchronEyes software to connect to every student included in a class list. A class list is a customizable list of the students who attend a class.

The advantage of using class lists is that it makes the student connection more flexible. However, you still have complete control of the class lists. This prevents students from connecting to the wrong class or from taking too much time to connect.

**NOTE:** When you create a class list and SynchronEyes software searches for students, it locates students only if their connection style is set to **Accept connection from a teacher**.

#### Connect to the Same Teacher Every Time

If you select this option, your students connect to the same teacher automatically. However, this option won't be suitable in some classrooms since it doesn't support multiple Teacher IDs.

If you select this option, the *Automatic Connection* dialog box appears. Type the Teacher ID, the IP address or host name for the connection.

#### **Student Name**

You can set up the software to display the student's name as:

- the mobile device owner's name combined with the mobile device's name
- the mobile device owner's name
- the mobile device's name
- a name the student chooses
- a customized name

#### Shared Files Folder

You can specify the destination folder for all the files you send to the student. The default destination is the student's My Documents\Shared Files folder.

#### NOTES:

- If you change the file location, select a location that's accessible to students.
- You can also specify an external storage space.

#### **Teacher Password**

To set password protection on the connection between the student and a teacher, select **Password required**, enter the teacher's password and then confirm the teacher's password. This restricts the student from connecting to any other teacher.

**NOTE:** For more information on defining the teacher's password, see the SynchronEyes software Help.

If you select **No Password**, the student can connect to any teacher.

- 5. When you've finished selecting the settings, click **OK**.
- 6. A message appears asking if you want to save the changes. Click Yes.
- 7. A message appears telling you that you need to restart the application. Click Yes.

# **Recommended Color Depth and Screen Resolution Settings**

For enhanced speed and program performance, the recommended screen resolution for the teacher's computer is  $1024 \times 768$ . Refer to the chart below for the optimal color depth and screen resolution settings.

Color Depth/ Screen Resolution	High Color (16-bit)	True Color (32-bit)
1024 x 768 or less	optimal	optimal
1152 × 864	acceptable	acceptable
1280 × 1024	acceptable	acceptable
1600 x 1200	acceptable	not recommended

However, if some or all of your students are using mobile devices, you may need to reduce your desktop's color and resolution settings before you broadcast to accommodate a mobile device's limited memory. For example, if a student's mobile device has 64 MB of memory and 64 MB of storage space, a broadcasted image must be less than approximately 2 MB.

The following table includes examples of screen width, screen height and color depth and indicates whether a mobile device with 64 MB of memory and 64 MB of storage space can display the image successfully.

Screen Width	Screen Height	Color Depth (bpp)	Image Size (MB)	Displayed?
1280	1024	32	5.00	No
		24	3.75	No
		16	2.50	No
1280	768	32	3.75	No
		24	2.80	No
		16	1.90	Yes
1152	864	32	3.80	No
		24	2.80	No
		16	2.00	Yes
1024	768	32	3.00	No
		24	2.20	Yes
		16	1.50	Yes
< 1024	< 768	32	< 2.20	Yes
		24	< 2.20	Yes
		16	< 2.00	Yes

# **Connecting to Students**

When you reconfigure the student's installation options, you set up student connection to one of three connection styles:

- Allow Students to Browse for and Connect to Teachers
- Accept a Connection from a Teacher
- Connect to the Same Teacher Every Time

#### Allow Students to Browse for and Connect to Teachers

If you selected this connection style, your students must connect to the correct Teacher ID manually.

Tell your students to connect as follows:

- Using the mobile device, navigate to the Start menu and click SynchronEyes Student 7.0.
  The Connection dialog box appears.
- 2. Either select the teacher's class from those listed or enter the Teacher ID, the IP address or host name for the connection.

#### Accept a Connection from a Teacher

If you selected this connection style, you connect to your students by selecting a class list (that is, a customizable list of the students who attend a particular class). Your class list can include students who are using computers and students using mobile devices.

For information on creating, editing and selecting class lists, see the SynchronEyes software Help.

#### **Connect to the Same Teacher Every Time**

If you selected this connection style, the student mobile devices connect to the same teacher's computer automatically. You set up this connection when you reconfigured the student options (page 3).

# The Teacher Interface

SynchronEyes teacher-station software offers five views:

- Thumbnails view
- Quiz view
- File Transfer view
- Chat view
- · Applications view

You can access a view by clicking its icon in the **Views** toolbar on the left side or by selecting a view from the **View** menu.

When you start SynchronEyes software, the Thumbnails view appears and you'll see miniature images of the connected students' desktops and mobile devices.

#### The Students List

The Students list appears on the right side of the interface when you're in the Chat, Applications, File Transfer and Quiz views.

The Students list includes:

- all the currently connected students (if you're viewing the All Students tab)
- all the currently connected students in a group (if you're viewing a group's tab)

The symbol next to each student's name indicates the student's status. When more than one status applies to a student, the symbol of greater importance appears. For example, if a student is both connected and asking a question, the **Question** symbol displays alongside the student's name.

The **Disconnected Mobile Device** and **Mobile Device** symbols are new in SynchronEyes software version 7.0.

Symbol	Status
Z	<b>Disconnected Mobile Device</b> - The student is using a mobile device but has disconnected.
	<b>Mobile Device</b> - The student is connected and using a mobile device.

# Monitoring, Controlling and Interacting With Students' Mobile Devices

This chapter lists the features of SynchronEyes software and explains which of these features are appropriate when your students are using mobile devices.

# Monitoring the Class

You can monitor the screens of your students' mobile devices. The Thumbnails view displays images of your students' mobile devices, enabling you to determine at a glance that everyone is focused on the assigned task. You can view the thumbnails of your entire class or of a group.

The Thumbnails view displays all thumbnails in a 4:3 ratio to make it easier for you to view and reorganize the thumbnails, and adds borders to the image as necessary to ensure that the thumbnail is not distorted by a change in ratio.

## Monitoring a Student's Mobile Device

You can view a student's mobile device screen in Full Screen mode (the student's mobile device screen fills your screen) or Window mode (the student's mobile device screen appears in a resizable window, with the Thumbnails view open at the same time). Window mode lets you switch between the live image of your student's mobile device screen and the other parts of SynchronEyes software.

## Capturing an Image of a Student's Mobile Device

When you're monitoring a student's mobile device, you can capture an image of the mobile device screen for your records and save it as a .jpg, .bmp or .png file. By default, the screen captures are saved to C:\My Documents.

#### Controlling a Student Mobile Device

When you're monitoring a student, you can take control of the student's mobile device. Any changes that you make are visible to the student in real time.

However, the control of the mobile device is always shared, regardless of your Control preferences. In instances in which both you and the student control the mobile device, the student's actions take precedence.

#### Locking Out Your Student(s)

You can get the attention of your class, a group or an individual student by locking mouse devices, keyboards and desktops and displaying a simple message. The default message is "Eyes to the front, please." You can customize this message.

When you place a temporary lock on students' mobile devices, you don't delete any of their work. When you remove the lock, the students' desktop views and control are completely restored.

# Disconnecting a Student's Computer

At the end of a class, some students may leave without disconnecting from SynchronEyes software. You can remotely disconnect a student's connection.

# **Broadcasting Teacher and Student Desktops**

You can broadcast your desktop to the entire class or to a group.

You can also broadcast a student's mobile device screen to the entire class or to a group. When you broadcast either your desktop or a student's desktop, you can give temporary control of the broadcast to a student.

However, if some of the students use mobile devices, you should limit your broadcast to ten students or less. You must also change some of your system settings and SynchronEyes software preferences.

- If the broadcast doesn't work as expected, reduce your desktop's color and resolution settings to accommodate the mobile device's limited available memory.
- For best results, disable UDP broadcasting by clearing the selection of Enable for Screen Broadcast in the Advanced preferences.

All broadcasts are full-screen on mobile devices, regardless of your Broadcast preferences. Also, if you're broadcasting the display of a student's mobile device, the control of the mobile device is always shared, regardless of your preferences. In the instances in which both you and the student control the mobile device, the *student*'s actions take precedence.

## Giving Control of a Broadcast to a Student

When you broadcast either your desktop or a student's mobile device screen, you can give temporary control of the broadcast to a student.

All broadcasts are full-screen on mobile devices, regardless of your Broadcast preferences. Also, if you're broadcasting the display of a student's mobile device, the control of the mobile device is always shared, regardless of your preferences. In the instances in which both you and the student control the mobile device, the *student*'s actions take precedence.

#### Writing Notes over a Student Desktop or a Broadcast

If you're monitoring a student or controlling a student's mobile device, you can write over that student's mobile device screen. Your notes are only visible on that student's mobile device.

You can also write over a broadcast and the digital ink displays on the mobile devices of everyone receiving your broadcast. This is a great way to direct your students' attention and make helpful notes for them.

- If you're using SynchronEyes software on a SMART Board™ interactive whiteboard, you can write notes using a pen tray pen.
- If you're working at your desktop, you can write notes using the menu options in the floating toolbar.

The digital ink is temporary and the underlying application is unaffected by your notes.

#### Conducting a Poll

You can send a Yes/No question to your class or a group for them to vote on. SynchronEyes software automatically tallies the responses and displays the result of the poll at the bottom of the window.

## Sending and Receiving Files

You can send files to your class using SynchronEyes software and they can send files to you.

If some of your students use mobile devices, don't send a file that would cause problems for the mobile device's limited available memory.

## **Creating and Distributing Interactive Quizzes**

SynchronEyes software facilitates every aspect of quizzes, from creating, distributing, collecting and marking quizzes to saving student responses and summarizing results.

Using the Quiz Wizard, you can quickly create an interactive quiz made up of various types of questions. You can customize the questions using images, font styles and colors, mathematical symbols and more.

After you've created a quiz, you can distribute the quiz to the entire class or to a specific group of students.

If some of the students use mobile devices, don't distribute a quiz that has more than 40 questions. Large quizzes may cause problems for the mobile device's limited available memory. Also, don't distribute a quiz that has a large number of images or a Matching question.

# Shutting Down, Logging Off or Restarting Students' Computers

Using SynchronEyes software, you can remotely shut down (or log off or restart) the computers of your class, a group or a selected student.

However, you can't shut down, log off or restart in this way if the student is using a mobile device.

#### **Blocking Internet Access**

Using SynchronEyes, you can block your students' access to the Internet if the student is using a computer.

However, you can't block the Internet access of a student who is using a mobile device. If you activate an Internet block for a class or group of students, some of whom have computers and some of whom have mobile devices, the Internet block applies to the computers only.

#### **Blocking Applications**

Using SynchronEyes software, you can block your students' access to specific applications using customized application blocking rules. You can't block applications in this way for a student who is using a mobile device. If you activate an application blocking rule for a class or group of students, some of whom have computers and some of whom have mobile devices, the application block applies to the computers only.

#### Launching or Closing an Application on Students' Computers

With SynchronEyes software, you can remotely launch an application on every student's computer with the click of a button. You can't launch an application in this way if the student is using a mobile device. If you launch an application for a class or group of students, some of whom have computers and some of whom have mobile devices, the application launches on the computers only.

Similarly, if you close an application for a class or group of students, some of whom have computers and some of whom have mobile devices, the application closes on the computers only.

# Viewing and Responding to Students' Questions

If your students are using' SynchronEyes software in Visible mode on a computer, they can send questions to you and you can send responses to each question.

However, students using mobile devices can't ask questions or view responses.

# **Showing Media to Students**

You can play media files on your computer and broadcast the media to the computers of the entire class, to a group or to an individual student.

However, you can't broadcast a media file for a student who is using a mobile device. If you play a media file for a class or group of students, some of whom have computers and some of whom have mobile devices, the media file plays on the computers only.

# **Chatting with Students**

SynchronEyes software allows you to chat with your whole class or a specific group.

However, students using mobile devices can't view or respond to student chat.

#### Launching a Web Page

You can remotely launch Internet Explorer and open a specific Web page on the desktops of your whole class, a group or selected students. You can also launch a Web page on your students' computers using the SynchronEyes software toolbar in Internet Explorer.

You can't launch a web page for a student who uses a mobile device. If you launch a Web page for a class or group of students, some of whom have computers and some of whom have mobile devices, the Web page launches on the computers only.

# **Customer Support**

# Online Support

www.smarttech.com/support

Visit the support site to view and download user guides, how-to and troubleshooting articles, software and more.

# **Training**

Visit http://smarttech.com/trainingcenter for free training materials and information on our training services.

# **Contacting SMART Technical Support**

SMART's Technical Support team welcomes your call. However, you may first want to contact your local reseller if you experience any difficulty with your SMART product, as they may be able to solve the problem without delay.

All SMART products include free telephone, fax and e-mail support.

**Online:** www.smarttech.com/contactsupport

**E-mail:** support@smarttech.com

Telephone: 1.866.518.6791 (toll-free in Canada/U.S.) or

+1.403.228.5940 (all other countries)

(Available 7 a.m. – 6 p.m. Mountain time from Monday to Friday)

**Fax:** +1.403.806.1256

When you phone SMART Technical Support, it's helpful if you have access to your product during the call. The support representative may ask you for the following information:

- when you purchased the product
- the reseller's name
- · the version of your operating system

# **General Inquiries**

Main Switchboard: 1.888.42.SMART (toll-free in Canada/U.S.) or

+1.403.245.0333 (all other countries)

**Fax:** +1.403.228.2500

**E-mail:** info@smarttech.com

Address: SMART Technologies Inc.

1207 - 11 Avenue SW, Suite 300

Calgary, AB T3C 0M5

**CANADA** 

# **Trademark and Copyright Information**

#### **Trademark Notice**

SynchronEyes, SMART Board and smarttech are either trademarks or registered trademarks of SMART Technologies Inc. in Canada, the U.S. and/or other countries. Microsoft, Windows and ActiveSync are either registered trademarks or trademarks of Microsoft Corporation in the United States and/or other countries. Adobe is a registered trademark of Adobe Systems Incorporated in the U.S. and/or other countries. All other third-party product and company names are mentioned for identification purposes only and may be trademarks of their respective owners.

# **Copyright Notice**

The use and copying of SynchronEyes software is subject to a license agreement. Any other use is prohibited. No part of this publication may be reproduced, transmitted, transcribed, stored in a retrieval system or translated into any language in any form by any means without the prior written consent of SMART Technologies Inc. Information in this manual is subject to change without notice and does not represent a commitment on the part of the vendor.

If you have any questions about what constitutes legal use of this product please consult the license agreement that came with your original software or contact SMART Technologies Inc.

Intellectual Property Information for SynchronEyes® Software ©1995-2007 SMART Technologies Inc. All Rights Reserved. U.S., Canadian and foreign patents pending. Licensed Commercial Third-Party Libraries:

Portions of this product were created using CAMTASIA OEM SDK Copyright © 1999–2006 Techsmith Corporation. All Rights Reserved.

Portions of this product were created using XTREME TOOLKITPRO™ 2006 Copyright (C) 1998-2006 CodeJock Software®, a division of Codejock Technologies, LLC P.O. Box 726 Owosso, Michigan 48867.

Portions of this product were created using the PAUL BUNYAN ® MESSAGE LOGGING SOFTWARE Copyright © 1999-2001 Diamond Sierra Corporation. All rights reserved.