

Student's Computer Won't Connect to the Teacher's Computer Using SynchronEyes™ Software Version 3.x



Applies to: SynchronEyes™ software version 3.x for Windows® operating systems

Issue

The student's computer won't connect to the teacher's computer using SynchronEyes software version 3.x.

Solution

If the student's computer is running in Hidden mode, set it to run in Visible mode. Then, follow the steps on the following pages to diagnose the connection problem.

To install SynchronEyes software and set the student's computer to run in Visible mode

1. Insert the SynchronEyes software CD in the student's CD drive.
2. Browse to the **Student Setup** directory on the CD.
3. Click the **Student Setup** button if it automatically appears or double-click **setup.exe**.
4. Follow the on-screen instructions to install SynchronEyes software.
5. Select **Leave SynchronEyes Interface Visible** on the *SynchronEyes Student Setup* dialogue box.

To diagnose the connection problem

1. If SynchronEyes teacher-station software and SynchronEyes student-station software are installed on the same computer, ensure they aren't running simultaneously, because it causes connection difficulties.
2. On the teacher's computer, select **Help > About SynchronEyes** in SynchronEyes software.
The *About* window opens.
3. Make a note of the computer's IP address, which is displayed towards the bottom of the Description tab.
4. On the student's computer, select **Start > Run** to open a command prompt.
5. Type **ping xxx.xxx.xxx.xxx** where **xxx.xxx.xxx.xxx** is the IP address of the teacher's computer. A successful ping response looks similar to this:

A screenshot of a Windows command prompt window titled "Shortcut to CMD.EXE". The window shows the following text:

```
Microsoft Windows 2000 [Version 5.00.2195]
(C) Copyright 1985-2000 Microsoft Corp.

C:\WINNT\system32>ping 172.16.1.11

Pinging 172.16.1.11 with 32 bytes of data:

Reply from 172.16.1.11: bytes=32 time=10ms TTL=128
Reply from 172.16.1.11: bytes=32 time<10ms TTL=128
Reply from 172.16.1.11: bytes=32 time<10ms TTL=128
Reply from 172.16.1.11: bytes=32 time<10ms TTL=128

Ping statistics for 172.16.1.11:
    Packets: Sent = 4, Received = 4, Lost = 0 (0% loss),
    Approximate round trip times in milli-seconds:
        Minimum = 0ms, Maximum = 10ms, Average = 2ms

C:\WINNT\system32>
```

If this fails, then there is a problem with the network path between the teacher's computer and the student's computer.

6. On the student's computer, double-click the **SynchronEyes Student** icon on the desktop to open the *Connect to Teacher* dialog box.

If you see the teacher's Teacher ID, the Teacher ID may have been defined incorrectly during the installation of the student software.

- i. On the student's computer, navigate to the SynchronEyes Student folder using Windows Explorer.
 - ii. Double-click **StudentConfig.exe**.
 - iii. Follow the instructions in the *Student Configuration Wizard* and select the options you want. Ensure you enter the correct Teacher ID.
 - iv. Click **Finish**.
7. If you don't see the teacher's Teacher ID in step 6, connect the student's computer to the teacher's computer using the IP address of the teacher's computer (see step 3).
 - i. On the student's computer, right-click the **SynchronEyes Student** desktop icon and select **Properties**.
The *SynchronEyes Student 3.0 Properties* window appears.
 - ii. Click the **Shortcut** tab.
 - iii. Scroll to the end of the text in the Target text box. After the double-quotation mark, type a space, and then type the teacher's IP address.
NOTE: A single space must separate your IP address from the double quotation mark.
 - iv. Click **Apply**.
 - v. Click the **Close** button.
 8. If you can connect the student to the teacher using the IP address, then the problem may be that IP Multicasting isn't enabled on the network. This may be because the network hardware doesn't support IP Multicasting, but sometimes this option is configurable. Ask the network administrator if this option can be enabled.

If IP Multicasting can't be enabled, change the connection settings of all the students, so that they connect by IP address instead of the Teacher ID, as shown in step 7.

TIP: To configure the other student computers with the same options as the first student computer, including the connection settings, copy the **SynchronEyesClient.ini** file from the SynchronEyes Student folder on the student's computer, and paste it into the same folder on the other students' computers.

You also need to set the teacher's broadcast settings to use TCP instead of the IP multicast feature.

- i. On the teacher's computer, select **Start > Run**.
- ii. Type `regedit` and click **OK**.
The *Registry Editor* appears.
WARNING: Take care when you modify the Windows registry. If you modify it incorrectly, you could cause serious problems to the Windows operating system. Consider backing up any registry keys to a .reg file before you change them.
- iii. Navigate to `HKEY_LOCAL_MACHINE\Software\SMART Technologies Inc.\SMART SynchronEyes Teacher\3.0`.
- iv. Double-click **Broadcast Type**.
The *Edit DWORD Value* dialog box appears.
- v. Type **1** in the Value Data box.
- vi. Click **OK**.
- vii. Close the *Registry Editor*.

9. If you can't connect the student's computer to the teacher's computer using the IP address, a network port is blocked by a firewall. The table below includes a list of the ports used by SynchronEyes software version 3.x. Ask the network administrator if there is a firewall between the student's computer and the teacher's computer.

Version	Communications Ports
3.0	5494 - TCP port (to establish connections and other basic communications) 5492 - TCP port (to auto-upgrade older student programs) 5495 - UDP port (to Multicast Show) 5496 - UDP port (to auto-detect the running teachers)
3.0.1	5497 - TCP port (to establish connections and other basic communications) 5492 and 5495 - TCP port (to auto-upgrade older student programs) 5498 - UDP port (to Multicast Show) 5496 - UDP port (to auto-detect the running teachers)
3.0.2	5497 - TCP port (to establish connections and other basic communications) 5492 and 5495 - TCP port (to auto-upgrade older student programs) 5498 - UDP port (to Multicast Show) 5496 - UDP port (to auto-detect the running teachers)

First Published: August 22, 2005

Last Updated: November 6, 2007

SMART Technologies
 1207 – 11 Avenue SW, Suite 300
 Calgary, AB T3C 0M5
 CANADA



www.smarttech.com/support www.smarttech.com/contactsupport
 Support +1.403.228.5940 or Toll Free 1.866.518.6791 (Canada/U.S.)

© 2007 SMART Technologies ULC. All rights reserved. SynchronEyes, smarttech and the SMART logo are trademarks or registered trademarks of SMART Technologies ULC in the U.S. and/or other countries. Windows is either a registered trademark or a trademark of Microsoft Corporation in the U.S. and/or other countries. All other third-party product and company names may be trademarks of their respective owners. Contents are subject to change without notice.11/2007.