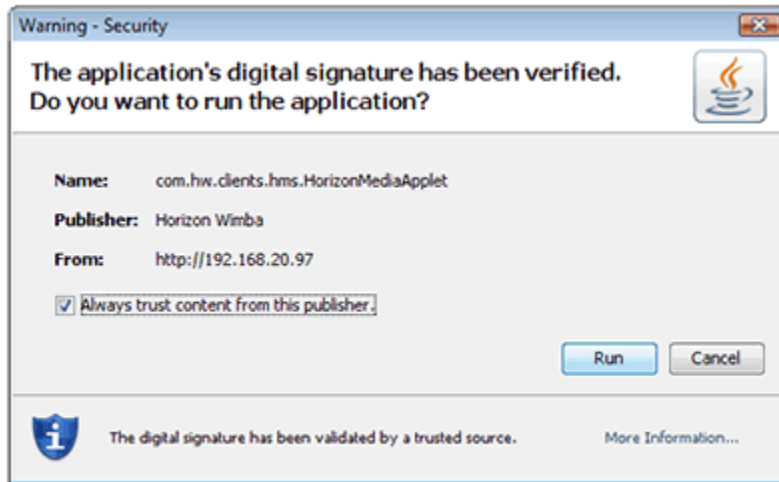


Audio and Video in Wimba Classroom

Authorizing WimbaMedia



The **WimbaMedia System** uses a signed Java applet to play audio and video on your computer. If you have not fully authorized the applet previously, you will receive a popup window similar to the one pictured above.

When asked if you wish to trust the signed applet provided by Wimba, click 'Always' or 'Grant Always.'

NOTICE FOR MAC USERS: *Certain Safari users will receive a different popup window. If so, under "When using this certificate" select 'Always Trust' and click 'OK.'*

Once you have successfully authorized WimbaMedia, you should see the **Media Bar** appear.

Media Bar



The **Media Bar** appears above the **Text Chat Area**. It is home to the **WimbaMedia System**, a multi-way audio and video means of communication during a live presentation.

The Media Bar contains the following items:

- **NetStats:** network statistics about your Internet connection
- **Talk button:** initiates your microphone and video broadcast (if the **Video Window** is raised and you have opted to transmit video)
- **Volume meters:** colored bars indicating you are sending/receiving audio
- **Camera button:** raises/lowers the **Video Window**
- **Telephone Simulcast:** backup option if you do not have a headset or microphone
- **Options Menu:** advanced audio/video settings

For more information on speaking and/or sharing video, please refer to: [Broadcasting Audio](#) and [Broadcasting Video](#).

Note: If the room is configured for Phone Simulcast Only, the **Media Bar** will only display the Telephone Simulcast icon.

NetStats

NetStats Indicator



Connected



Disconnected

The **NetStats** Indicator displays the overall quality and strength of your connection to the **WimbaMedia System**. This is depicted graphically in the **Media Bar**, and updated at regular intervals, so that you can monitor your connection.

Monitoring Media Quality

First, ensure that WimbaMedia has connected by viewing the triangular 'hat' on top of the NetStats Indicator. If you do not see the hat, then you were unable to connect, and you will not have the ability to send or receive audio/video.

A hat on top of the Third Bar (green) indicates a clear connection (Great Quality).

A hat on top of the Second Bar (orange) indicates an adequate connection (Good Quality).

A hat on top of the First Bar (red) indicates network congestion (Poor Quality).

If you click the **NetStats** Indicator, you can view diagnostic information that may be requested when speaking with Technical Support.

If the hat does not appear (and the bars are gray), then you have no connection. If you should ever lose your connection, you may re-launch WimbaMedia by clicking the Options Menu and selecting Reconnect Media. This should restore your connection to presentation media.

Using WimbaMedia Audio

Using WimbaMedia, participants are able to speak when authorized by the presenter.

- If you'd like to speak, you will need a microphone.
- If you are using an unsupported browser or OS, then you may be able to participate using the telephone simulcast.
- Preparing Your Microphone and Computer:
 - o We recommend using a headset (with integrated headphones and microphone). Headphones will generally produce better audio quality than speakers, and they will also prevent the audio you receive from being picked up by the microphone when you speak.
 - o Before you attend a presentation, make sure that your audio devices are properly connected to your computer. Speaker/headphone plugs are usually color-coded to match the output port of most PCs. Typically, speakers/headphones will be plugged into the green port to your sound card. If your computer does not come with color-coded ports, search for the icon that resembles either sound waves with an arrow pointing outward or headphones.
 - o Microphone plugs are also usually color-coded to match the microphone port of most PCs. Typically, microphones will be plugged into the red or pink port to your sound card. If your computer does not come with color-coded ports, search for the icon that resembles a microphone.

Speaking Privileges

What to expect during the presentation:

- You can speak if enabled by your presenter
- You can also communicate via text chat (for instance, if you don't have a microphone)
- Once the presentation starts, you will automatically hear the presenter's audio
- You will see a **Speaking Privilege** (+ or -) indicator next to your name in the participant list



If the **Speaking Privilege** icon next to your name is positive (+), you have the ability to speak.

If the **Speaking Privilege** icon next to your name is negative (-), you do not have the ability to speak.

You can click the **Hand Raise** button to notify your presenter that you have a question and would like to speak. Once your presenter enables you to speak, your **Speaking Privilege** indicator will become positive and you will receive both textual and audio confirmation.

Broadcasting Audio

Talk Button



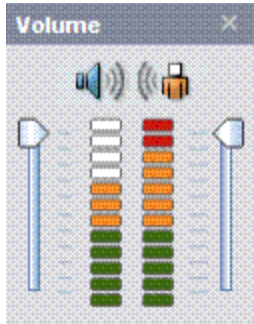
To Broadcast Audio:

1. Speak into your microphone and select one of the following options:
 - Press and hold the **Ctrl** key on your keyboard as you speak.
 - Click and hold the **Talk** button as you speak.
2. While speaking, the **Talk** button will change color from dark gray to orange. In addition, an orange box will light up within the **Speaking Privilege** indicator to the right of your name in the participant list.
3. When you have finished speaking, release the **Ctrl** key or **Talk** button.

Note: If you wish to use the **F8** key (instead of **Ctrl**), or disable the **Talk Hot Key**, refer to [Options Menu](#).

Volume Controls

Overview



The meters to the right of the **Talk** button register the levels of incoming and outgoing audio. Anytime someone else speaks, you should see the colorful bars of the **Incoming Audio** meter (left) fluctuate with the volume level you receive.

You can adjust the Incoming Volume by clicking on the volume meters and moving the slider to the left of the incoming level meter.

The **Outgoing Audio** meter (right) registers the audio that you send. Anytime you speak, you should see the colorful bars of this meter fluctuate with the volume level you send. For optimal audio quality, click on the volume meters, and watch your Outgoing Audio level when speaking. The bars should reach the top of the orange range (third indicator from the top) consistently, and occasionally reach the top two (red) levels. If the volume is too high, your voice may be distorted and others will be able to hear you breathing. If the volume is too low and does not go above the green levels, the system will try to amplify the sound and possibly create distortion.

You can adjust the Outgoing Volume by clicking on the volume meters, and adjusting the slider to the right of the outgoing level meter. You may also adjust it using your computer's recording settings.

To be able to receive and send audio/video, you need to ensure that WimbaMedia is connected during the presentation. When connected, the **NetStats** Indicator to the left of the **Talk** button should appear in color. If it appears gray, then WimbaMedia is not connected to presentation media.

Volume Controls (and more advanced settings) can also be adjusted using the [Options Menu](#).

Solving Technical Issues

To Resolve Microphone Problems

If others cannot hear you speak in the presentation, make sure that the presenter has enabled you to speak. The **Speaking Privilege** icon next to your name in the participant list should be positive.

If you have correctly connected your microphone (and you have been enabled to speak), but others still cannot hear you, you should ensure that a) your computer's recording controls have the proper settings, and b) your microphone is functioning.

To Check Recording Control Settings (PC)

1. Open your *Volume Controls* by selecting: Start -> Programs -> Accessories -> Entertainment -> Volume Control.
2. Click the *Options* menu and select *Properties*.
3. Select the *Recording* button.
4. From the list, make sure *Microphone* has a check mark next to it.
5. Click *OK*.
6. Lastly, go to the *Microphone* section and make sure the select box is set to a non-muted option. You may also want to adjust the slider, if volume level is an issue.

To Check Volume Control Settings (Mac OS X)

1. Open your *Sound Preferences* by selecting: Apple Menu -> System Preferences -> Sound -> Input.
2. Make sure that the *Input Volume* slider is sufficiently to the right and the correct device is selected for sound input.

Check Microphone Function (PC)

If your volume controls have the proper settings, you should ensure that your microphone is functioning. First ensure that your microphone is turned on (if there is an on/off switch) and properly plugged in. You can then record an audio clip and listen to that clip to ensure that your computer can properly capture your audio:

1. Open your *Sound Recorder* by selecting: Start -> Programs -> Accessories -> Entertainment -> Sound Recorder.
2. Click the circular *Record* button to start your recording.
3. Speak into your microphone for several seconds. As you speak, you should see the audio meter register your voice.
4. Click the square *Stop* button to stop your recording.

5. To play back your recording, click the triangular *Play* button. You should hear the audio clip you have recorded. If you can't hear the clip (or did not see the audio meter register your voice), the issue is most likely related to your microphone.

Check Microphone Function (MAC)

If your volume controls have the proper settings, you should ensure that your microphone is functioning. First ensure that your microphone is turned on (if there is an on/off switch) and properly plugged in. You can then use your Sound preferences dialog to determine whether your computer can properly capture audio:

Open your *Sound Preferences* by selecting: Apple Menu -> System Preferences -> Sound -> Input.


When you speak into the microphone, the Input level volume meter should register your audio. If it does not, the issue is most likely related to your microphone.

Telephone Simulcast

The Telephone Simulcast provides a backup option if your microphone is not working. For complete details, refer to: [Telephone Simulcast](#).

Telephone Simulcast

The **Telephone Simulcast** provides a backup option for users who do not have a microphone or are experiencing technical difficulties.

1. To access the Simulcast, click the **Phone** icon . A telephone number and PIN will appear. (If the **Media Bar** does not appear, type **/phone** in the **Text Chat Area** and press **Enter** on your keyboard. Dial-in information will then be displayed textually).
2. Dial the telephone number provided and enter the PIN when verbally prompted. You will hear three tones, indicating that you have successfully connected. You can now listen to session audio via telephone. If you are enabled to speak, you can do so using the telephone.

Note: Use of this option requires simultaneous access to the telephone and Internet for full participation in the presentation.

Using WimbaMedia Video

Using WimbaMedia, participants are able to speak and share video when authorized by the presenter.

- If you'd like to speak, you will need a microphone. For more information on setting up your microphone, refer to: [Using WimbaMedia Audio](#)
- If you'd like to broadcast video, you will need a supported video device (such as a webcam)
- We recommend using a webcam that either plugs in to a USB port or comes integrated in your computer
- Before you attend a presentation, make sure that your video device is properly connected to your computer

Video Window

Overview



The **Video Window** displays a streaming broadcast of any user sharing video. This window will automatically appear upon entry to Wimba Classroom only if someone is sharing video. It can be opened or closed manually by clicking the **Camera** button on the **Media Bar**.

The window contains three buttons:

- **Start/Stop transmitting video:** enables/disables your video device
- **Show/Hide preview video:** provides a live, mirror-image representation of your video image. For more information, refer to [Video Preview](#)
- **Display video full screen:** increases the size of the broadcast to take over your full screen. To restore the window size, either press the Esc key on your keyboard, or double click your screen.

Whenever a user broadcasts video, the name with which they are logged in to Wimba Classroom appears within the **Video Window** for identification purposes. To toggle a user's name on/off within this window, press Alt-A (Windows) or Command-A (Mac).

To increase the size of the **Video Window**, move your cursor to its edge. When the cursor changes shape, click and drag the cursor away from the center of the **Video Window**. Likewise, to decrease the size of the window, move your cursor to its edge. When the cursor changes shape, click and drag the cursor towards the center of the **Video Window**.

Video Preview

Overview



Video Preview provides a picture-in picture review of your image within the **Video Window**.

This preview automatically appears whenever you click the **Start transmitting video** button. It can also be enabled/disabled by clicking the **Show/Hide preview video** button.

By default, the preview image appears in the lower right-hand corner of the **Video Window**, however, it can be altered in several ways.

To Move the Preview Image:

1. Place your mouse cursor over the image
2. Hold down your mouse button and drag the image to any corner of the **Video Window**. Let go of your mouse button to drop the image at the desired location.

***Note:** If you drag the image outside of the **Video Window**, the preview will disappear (and the **Hide preview video** option will be engaged).*

To Resize the Preview Image:

1. Place your mouse cursor in the corner of the image opposite to its position in the **Video Window** (i.e., if the image is in the lower right-hand corner, place your cursor in the upper left)

2. Hold down your mouse button and drag the image (away from its corner to increase its size, or toward its corner to decrease)

Video Broadcasting Privileges

What to expect during the presentation:

- You can broadcast video if enabled by your presenter.
- You can also communicate via text chat (for instance, if you don't have a microphone or supported video device)
- Once the presentation starts, you will automatically hear the presenter's audio. You may also see video if the presenter has a supported video device and is sharing.
- You will see a **Video Privilege** (+ or -) indicator next to your name in the participant list.



If the **Video Privilege** icon next to your name is positive (+), you have the ability to broadcast video.

If the **Video Privilege** icon next to your name is negative (-), you do not have the ability to broadcast.

You can raise your hand (to request to speak) or use the **Text Chat Area** to notify your presenter that you would like to share video. Once your presenter enables you, you will see the icon become positive and you will receive textual confirmation.

Broadcasting Video

Camera Button



To Broadcast Video and Audio:

1. If the **Video Window** is not raised, click the **Camera** button on the **Media Bar**.
2. Click the **Start transmitting video** icon (depicted by a closed eye).
A preview of your video will appear in the lower right-hand corner of the window.
3. To share video and speak into your microphone:
 - Press and hold the **Ctrl** key on your keyboard as you speak.
 - Click and hold the **Talk** button as you speak.
4. While broadcasting and speaking, the **Talk** button will change color from dark gray to orange. In addition, an orange box will light up within the **Speaking** and **Video Privilege** indicators to the right of your name in the participant list.
5. When you have finished speaking, release the **Ctrl** key or **Talk** button. This will also stop your video broadcast.

Note: If you wish to use the **F8** key (instead of **Ctrl**), or disable the **Talk Hot Key**, refer to [Options Menu](#).

Video Lock

Overview



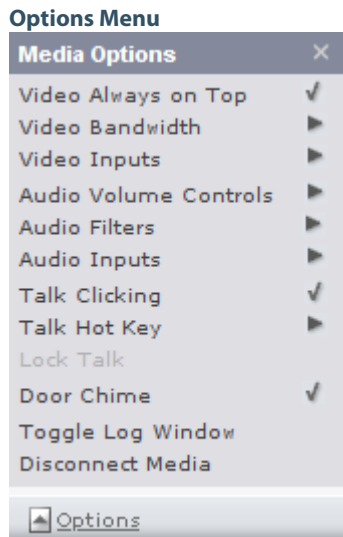
Video Lock allows a single user to broadcast video within Wimba Classroom, regardless of who is currently speaking. As with normal video broadcasting, your **Video Window** must be open and video transmission started.

During a presentation, your presenter may engage this feature so your broadcast appears uninterrupted. You will not have the ability to lock your own video.

The **Video Privilege** indicator to the right of a user's name in the participant list will turn into a lock. Even when **Video Lock** is enabled, you still must either use the **Ctrl** key (or **F8** key, if selected as your **Talk Hot Key**) on your keyboard, or hold down the **Talk** button to speak.

Options Menu

The **Options Menu** provides a number of advanced media settings. These options only apply for as long as you are logged in to Wimba Classroom, and must be selected again upon re-entry (or if the room is reset by the instructor).



Video Always on Top

By default, the **Video Window** is on top of all other application windows, unless it is minimized. You may disable this behavior by selecting this option.

Video Bandwidth

Video within Wimba Classroom is broadcast to other users at a default rate set prior to your presentation. This option allows you to alter the broadcast you send to other users from a number of different quality levels (ranging from Low to Highest Quality). Levels higher than the default rate will be unavailable.

Video Inputs

Allows you to manually select a supported video device other than the one automatically detected upon entry to Wimba Classroom.

Audio Volume Controls

- **Speaker Volume Up/Down:** raises/lowers incoming (speaker) audio volume
- **Microphone Volume Up/Down:** raises/lowers outgoing (microphone) audio volume

Audio Filters

Filters allow you to customize the quality of your audio, should you wish to make adjustments:

- **Auto Gain Control** can be used to help normalize the volume of incoming or outgoing audio, thus keeping the volume levels relatively steady. Low-level audio will be boosted and high-level audio will be reduced.
- **Noise Reduction** can be used to help reduce the level of background noise picked up by the microphone in use.
- **Silence Detection** can be used to ensure that you transmit audio only when you are speaking, preventing static or background noises. This feature should normally be kept on. However, if you find that your speech is not being properly detected, you can disable this filter, which will cause your audio to be transmitted at all times.
- **Echo Cancellation** detects outbound audio sent by a user, which is then repeated back through another user's inbound audio, and attempts to remove its echo effect. The most common scenario where this may occur is if a user's microphone picks up sound being transmitted from standalone speakers. This feature is only available on supported Macintosh systems.
- **Microphone Boost** is a system setting that will enhance your audio input if your microphone level is too weak. This is not selected by default, should only be used in rare circumstances, and is only available for certain sound cards on supported Windows machines.

Audio Input

Allows you to manually select an audio device other than the one automatically detected upon entry to Wimba Classroom.

Talk Clicking

Enables/disables an audio cue (click) heard whenever pressing the **Ctrl** key (or **F8** key, if selected as your **Talk Hot Key**) on your keyboard or clicking/releasing the **Talk** button. This is enabled by default as an accessibility feature for visually impaired users.

Talk Hot Key

By default, the **Ctrl** key on your keyboard is the designated **Talk Hot Key** to broadcast audio (and initiate a simultaneous video and audio broadcast). You may instead select the **F8** key, or disable this feature entirely. If disabled, you must click and hold the **Talk** button.

***Note:** If you are using Mac OS X 10.5 (Leopard) and running the Spaces feature, reconfigure the **F8** key so it is available, if you plan to designate it as your **Talk Hot Key**.*

Door Chime

Enables/disables audio notification whenever an individual enters/exits Wimba Classroom. This option is disabled by default.

Toggle Log Window

Displays WimbaMedia log information that may be requested when speaking with Technical Support.

Disconnect/Reconnect Media

This option should only be utilized if you are unable to connect to WimbaMedia, or need to re-establish your connection to presentation media.

Phone-Only Users

If your live presentation requires that you participate using only your telephone, or if you are unable to log-in online and have previously mentioned this to your instructor, you should be provided with dial-in information (a phone number and PIN) relevant for your session.

List of keypad functions available to Phone-only users

Phone-only Keypad Command	Function
*6	Mute/unmute self
*9	List of commands
*10	Raise hand
*11	Indicate "yes" (poll)
*12	Indicate "no" (poll)

For more information, please contact your presenter.