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Welcome to Personal Software Capture!

Personal Software Capture (also sometimes referred to as Personal Capture or PCAP) is a capture application built primarily for you, the Academic Staff user.

With Echo360 Personal Software Capture, you can record your voice (audio), your local computer screen (a PowerPoint presentation or other material) and a webcam video.

To create recordings, select the inputs and record. The recording is saved locally and can be edited before publishing to the EchoSystem Server (ESS). Only recordings you select will be uploaded. Feel free to record several times to achieve your desired results.

Once published, the recording will be made available to students in all the formats ("outputs") you select.

Thank you for using Echo360 Personal Software Capture.

Supported Web Cameras for Personal Software Capture

The following cameras have been tested for use with Software Capture for Windows:

- Creative Live! Cam Socialize (VF0640)
- HP HD-3110
- HP HD-4110
- Logitech Webcam C905
- Logitech QuickCam Pro 9000
- Logitech HD Webcams: C270, C310, C525, C615
- Logitech C910, C920
- Microsoft LifeCam Cinema
- Microsoft LifeCam HD-3000

Refer to the sections below for information and best practices when recording with Personal Software Capture.

If Your Capture is Blank:

Echo360 Software Capture uses the Windows Media Foundation (WMF) for video capturing. Specifically the cameras must be WMF YUY2 or RGB24 compliant (the camera packaging should indicate this). If your capture is blank, first check to make sure the camera is attached (if external) and then try an Audio/Video capture.

Best Practices for Web Cameras

The following is a list of some best practices for the installation and use of external cameras with Personal Software Capture.

- **Current drivers.** Use the most current drivers for your web camera. You can find these drivers on the website of your PC or laptop manufacturer. You can also
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have the operating system of your computer search for current drivers. Current drivers ensure interoperability with WME.

- **OS Updates.** Please have the most current updates applied to your operating system.

- **"Driver-only" installation.** If possible, use the "driver-only" installation of the camera software. Most web camera vendors allow for this. Sometimes, the software included with the web camera can interfere with the Personal Capture connection to the web camera. In some cases, the "driver-only" method is the only supported method.

- **Test a capture.** Perform and review a test capture before using the camera routinely. See Test Protocol for Web Cameras below.

**Test Protocol for Web Cameras**

Use the following test protocol the first time you use any web camera, even if it has already been tested by Echo360.

It is even more important to do this if you are using an unsupported web camera. In many cases an unsupported web camera will work. If the web camera fails, please enter a support request.

**To test a camera with Personal Software Capture:**

1) Ensure that there are no other software applications accessing the web camera while Personal Capture is running.

2) Do a 15-minute A/V capture/recording with the unsupported camera.

3) Examine the media using the Personal Capture software editor.

4) Publish the capture to the EchoSystem Server (ESS) and wait for processing.

5) Evaluate the processed results (the "output products") from the ESS.

6) Do the output products meet your standards?
Configure Software Capture Defaults

The two things required to publish a capture generated with Software Capture are:

- A valid login for a Personal Capture licensed user
- The URL for the EchoSystem Server (ESS) to which the capture is to be published.

You can configure these items for Software Capture the first time, and as long as the information doesn't change, the settings are used every time for publishing captures.

Configure Login

Click the Login link at the top of the Software Capture window, shown in the below figure, to set the login credentials to use for publishing.

These credentials are used to:

- Identify the sections to which you are associated. This allows you to select the section to which a capture should be published.
- Determine whether you are licensed for Software Capture. Any user can create a capture, but only licensed users can publish captures to the ESS.

Use the dialog box that appears to enter your ESS login credentials.

Click the Save Password checkbox to retain this information and use it for all captures published from this installation. Or leave the box unchecked and enter your credentials every time you publish a capture.

Once you are logged in, the "Login" label at the top of the window changes to show your username.

Configure ESS Settings

Click the Settings button at the top of the Software Capture window, identified in the below figure (it looks like a gear), to set default information for captures.
Use the dialog box, shown below, to enter the following information:

- **ESS URL**: The ESS to which you will publish captures. For new installations this field may contain a “dummy” address and need to be populated with the URL to the ESS. For example: https://EchoServer.institution.edu:8080/ess/.
  - This is the same URL you use to log into the ESS to manage echoes or upload media.
  - You may also be able to use the first part of the URL of your course EchoCenter URL, if your institution does not use an LMS.
  - Click **Test Connection** to verify the accuracy of the location you enter.
  - If you are not sure, contact your System Administrator.

- **Storage Location**: Identifies the location on the local machine where capture files are stored. Click **Browse** to change this at any time if needed.

This information is retained and used for all captures generated and published from this Software Capture installation. It can be changed any time necessary.
Configure Capture Input and Output

Personal Software Capture allows you to select the inputs you want to capture for each recording, and the output quality for the capture. The below figure identifies the locations of the drop-down lists for selecting recording inputs and capture quality output.

Select Input for Recording

Software Capture allows you to record up to three inputs, as follows:

- **Audio only (A)** - capturing only audio input. This generates an MP3 file for students to listen to.
- **Audio and Video (A/V)** - capturing sound and video input from the built-in or USB-connected video camera.
- **Audio and Display (A/D)** - capturing sound and whatever is shown on the computer screen.
- **Audio, Display, and Video (A/D/V)** - capturing sound, the display on the computer screen, and video input.
- **Audio and Dual Video (A/V/V)** - capturing sound and the input from two different video sources.

**Note the following about Audio input:**

- You cannot choose **None Selected** for audio input; audio is always captured.
- You can use the internal microphone, an externally attached microphone, or a microphone on an externally attached camera if there is one.
- You MUST have at least one audio input. Software capture will not allow you to record without audio.

After you select the appropriate inputs, check the preview of those inputs shown on the screen. Each are identified in the following figure and described below the figure.
Configure Capture Input and Output

- **Microphone Input** is shown in the light-bar above the preview panes. If you do NOT see this bar changing as sounds are made, check your microphone connection and functionality. **If the sound bar on the screen is not registering sounds, your capture may not have audio.**

- **Display or Second Video Input** is shown in the left panel of the preview panes. Capturing Primary Display captures whatever appears on the computer screen. If you are using two video inputs, this will show whatever the selected camera is currently aimed to view.

- **Primary Video Input** is shown in the right panel of the preview panes. If you are not capturing video, this option will show **None Selected**, and the right preview pane will be blank.

**Select Output Quality for Capture**

The output selection drop-down list is located on the right side of the preview screen above the Primary Video preview pane. It is circled in the figure at the top of this page. This selection allows you to determine the resolution of the video and display output of the capture, which in turn determines the size of the capture files saved to your drive and subsequently uploaded to the ESS and viewed or downloaded by students.

The selections available are as follows:

- **Low Quality/Smaller Files** - This creates a capture with low-resolution video and display. The lower resolution keeps the final file size to a minimum. This is a good choice if section quota size is a concern, or if you or your students have bandwidth issues that may cause larger file uploads or capture playback to fail.

- **Medium Quality/Medium Files** - This is the default setting. It generates a capture with medium resolution video and display. This setting creates medium sized files for the recording. This setting is probably sufficient for playback on most devices.

- **High Quality/Larger Files** - This setting creates high-definition resolution for video and display. Consequently this setting also creates very large files for these captures. Use this setting if you have visual details in the display or video of the capture that requires students to see the recording in very high resolution.
Otherwise this setting should be used sparingly, due to the time required to upload and process the completed capture. In addition, this setting uses significant computer resources; if your computer cannot process a high quality capture properly, your capture may be blank. If you DO need to use the High Quality setting, run a test capture first, to be sure it will work.

**Configuring Quality Selection Settings - Advanced Users Only**

The resolution defaults for Software Capture outputs are maintained in a set of XML files installed with the program. If the resolution and other output details for the pre-configured selections are not appropriate for your situation and needs, you can manually configure these files. Changes in the XML files will change the output generated for captures made with the corresponding selection in the interface.

If you are not familiar with working in XML files, you are strongly encouraged to work with a local expert or contact Echo360 Customer Support for assistance. **You must have Windows Administrator rights on the computer to alter these files.**

The output quality XML files are located in the /config/ sub-folder of the Data directory identified during installation. By default this is: `c:/ProgramData/Echo360/PersonalCapture/config`

The directory contains the following files:

- **HighRes.xml** - This file controls the output resolution of the High Quality/Larger Files selection.
- **MedRes.xml** - This file controls the output resolution of the Medium Quality/Medium Files selection.
- **LowRes.xml** - This file controls the output resolution of the Low Quality/Smaller Files selection.

Each XML file contains property values that determine the capture output quality for Audio, Display, and Video inputs. If needed, you may change these files to generate different output settings for each of the selection options.

**You must restart the Software Capture application for your changes to these files to take effect.**

### Create Copies of the Original XML Files Before Editing

We strongly recommend that you save a copy of the original XML files, as installed, PRIOR to making changes. In the event something happens where the altered files do not work or are not generating the desired output, you will want to have the original files for the program to use. You can simply create a copy in the same directory with "_ORIG" appended to the file name. For example, MedRes_ORIG.xml.
Create Software Capture Recording

Software Capture allows you to create personal recordings, outside of the classroom, providing additional learning materials for students.

Software Capture recordings are saved locally. You can then manually publish them to the ESS, or check the Auto-Publish checkbox to publish a recording immediately when finished.

The ability to manually publish recordings means that you can practice with the program and create as many test recordings as you like. You can even practice editing the recordings until you are comfortable with the interface, and delete the test recordings when you no longer need them.

The ability to Auto-Publish a recording, means you can complete a recording and walk away from the computer and even close the application as soon as you are finished. The recording will be published to the ESS in the background.

Creating a Recording

To begin creating a Software Capture recording:

1) Enter a Title for the recording using the title bar at the top of the page. You can change this later if needed.

2) Check or set the capture inputs. Use the Preview window to make sure they are capturing what you need to include in the recording.

3) Check or set the capture output quality.

4) Set up the presentation or visual experiment or other items you are planning to capture, and check the Preview panes for verification.

5) Click Record.

The locations for performing each of these steps is identified in the below figure.
After you click **Record**:

- If Auto-Publish is checked, the following dialog box appears asking you to enter a **Title**, select a **Course**, and the **Output** products to be created for the recording.

![Before recording, please provide the following information](image)

- A five second countdown appears in the window.
- Once the countdown finishes, recording begins and the preview window minimizes to the taskbar.
- The Record button changes to show **Stop** and **Pause**.

You can use the **Stop** and **Pause** buttons in the interface to manipulate the recording, or you can use the keyboard shortcuts as follows:

- Pause/Resume toggle: **Alt+F5**
- Stop: **Alt+F6**

If the **Auto-publish** checkbox was checked when recording started, the capture will be automatically published to the ESS when you stop recording. Be advised, however, that if Auto-publish is checked, you cannot review or edit the recording before publishing it.
to the ESS. The recording will still be saved locally, so you can edit the capture and re-publish it later if necessary.

After you stop recording, the capture is completed and appears in the list of recordings at the bottom of the Software Capture window. From there you can publish, edit, or delete the recording. The figure below shows the Publish, Edit and Delete icons that appear when you hover your mouse over a recording in the list.

![Software Capture Recording](image)

**Deleting a Recording**

If you no longer need to keep a recording, you can delete it.

Deleting a recording in Software Capture does not delete the capture from the ESS (if the recording was published). It simply deletes the recording from the local machine. If appropriate, you may want to double check the information shown for the recording, to see that the recording was published, prior to deleting it.

To delete a recording, hover the mouse over the recording you want to delete and click the Delete icon, as shown in the below figure.
You will be asked to confirm the deletion. Deletion is permanent and cannot be undone.
Review and Edit Software Capture Recording

The Software Capture program contains some basic review and editing capabilities for captured recordings, including:

- **Review the recording**, including review of edits before applying them permanently.
- **Trim the beginning and end** of the recording ("top and tail")
- **Cut segments** out of the recording as needed.

Capture review and editing are performed through the **Editing Window** described below.

Please note the following about editing and Auto-Publish:

- Logically, captures that are **Auto-Published** cannot be edited in Software Capture first; they are automatically published to the ESS as soon as recording ends.
- You can, however, edit the capture through the ESS if necessary.
- Or you can edit the locally saved version of the recording, and **manually re-publish the capture**, replacing the original, if appropriate.

If your institution has integrated Lecture Tools with EchoSystem, you can also add Lecture Tools materials to a published Personal Capture recording, to provide students with pre-class exercises, such as polls or quizzes. Student responses can then be discussed in class.

**Long Recordings Take Time to Load for Editing**

If you are editing a very long recording (multiple hours) it may take up to several minutes for the capture to fully load in the Editing Window. You will see the capture in the window, along with the editing tools, and you can make temporary cuts or trim the recording as needed. However you may notice that the **Apply edits** button reads **Loading...** instead. This will continue until the entire capture is loaded for editing.

**Access the Editing Window**

Review and edit of a Software Capture recording are both performed in the Editing Window.

To open the editing window, hover your mouse over the recording and click the **Edit** button, identified in the below figure.
The Edit Window appears, shown below. The figure below identifies the main editing window features, which are discussed in more detail in the subsequent sections of this document.
Review the Recording

Use the playback controls to play the recording. If you have made cuts in the recording, the playback will skip the cut areas, so you can see how the edits affect the final product.

The figure below shows the playback controls, and has the current location of the playhead identified, both as the timed location, and within the playback bar itself.

It can be useful to note the timed location of the playhead when the recording gets to a point you need to edit, either as a cut, or to trim the beginning or end of the recording. Jotting down the timed location can help you move the trim sliders or cut marks more quickly and accurately, to make edits.

When the playhead gets to a cut location (identified as the lighter area in the playback bar), the playhead will skip over the cut in the bar, and the timed location will change in conjunction with the skip.

Trim the Recording

Also referred to as “top and tail”, the editing window allows you to cut off the beginning and ending of the recording as needed. For example, you may begin recording then have to start over again. With the Trim capability, you don’t have to stop and create a new recording. You can simply begin again while the current session is running, and then trim the “false start” from the beginning of the capture when finished.

This also allows you to remove any last keystrokes or other movements used to end the recording, such as opening the software capture window and clicking Stop to end the session. This too can be trimmed from the final capture.

Click and drag the trim sliders to move them.

Notice that as you drag the sliders toward the center of the playback bar, the start time and end time change in conjunction with the new start or end points of the recording.
When finished, click **Apply edits** to permanently apply these changes to the recording. **This cannot be undone!**

**Cut Segments from the Recording**

When you first open the Edit window, you see a larger triangle positioned at the beginning of the recording. If you click the triangle and slide it, you will notice that it is made up of two smaller triangles. These are cut markers and are used to identify the beginning and end points of a section to cut from the recording.

**NOTE:** Any cuts you make are temporary until you select to **Apply edits**. This is discussed in more detail below.

**To temporarily cut a segment from the recording:**

1. Click and drag the two smaller triangles to the appropriate beginning and end points of a segment.
2. Click **Make cut**, located at the bottom right of the window.

The below figure shows the two parts of this process.

![Temporary Cut Process](image)

Once the cut is made, the segment turns darker than the original playback bar.

Clicking Make cut frees up the cut markers to make another cut in the recording. The figure below shows a playback bar with multiple temporary cuts made.

![Multiple Cuts](image)

As long as the cuts remain temporary, you can remove the cut and return that section of the recording to its original state.

**To remove a temporary cut:**

- Double-click the cut segment in the playback bar.

When a cut is removed, the segment returns to the same color as the rest of the playback bar.

**To clear all temporary cuts:**

- Click **Clear Cuts**, located on the bottom left side of the window.
Use the playback controls to review your edited recording. The playback head will skip over any cuts you have made so you can see how the recording will look when it is published.

**To permanently apply changes:**
- Click **Apply edits**, located in the bottom right corner of the window, as identified in the above figure.

Clicking Apply edits makes your changes permanent. **This cannot be undone!** You will receive a warning message to be sure you want to apply your changes to the recording.

In the list of your recordings at the bottom of the Preview Window, those that have been edited are marked as Edited. This allows you to quickly determine which recordings may still require edits before publishing.

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**Publish Software Capture Recording**

Publishing a Software Capture recording uploads the file to the ESS for processing. Once processed, the recording is posted in the EchoCenter for the section you identify, allowing students to view the material.

If your institution has integrated Lecture Tools with EchoSystem, you can also add Lecture Tools materials to a published Personal Capture recording, to provide students with pre-class exercises, such as polls or quizzes. Student responses can then be discussed in class.

There are two publishing modes for Personal Software Capture:
- **Auto-Publish**
- **Manual Publish**

You should also understand the following about the publishing process as a whole, which applies to both Auto and Manual publishing:

- While the actual file upload process happens in the background, you MUST wait until the "Finalization" and "Prepare to Publish" processes for the capture have finished, BEFORE closing the application. These statuses are noted on the screen and you will receive a notice if you attempt to close the application before they are complete.
- The Prepare to Publish process should take less than a minute.
- The Finalization process may take several seconds, or several minutes, depending on the length of the recording. Plan to allot for this time for longer recordings.
- The Publishing process occurs in the background but does require a network connection to the ESS. If this process is interrupted (network outage, turning off the computer or putting it to sleep), publishing will resume once the connection is re-established.
Once the recording is published, it must be processed by the ESS before posting to the section. This may take from several minutes to several hours, depending on the current load and configuration of the ESS. Wait an appropriate period of time, then check the EchoCenter for the section to find the newly published capture.

If you do not see the capture initially in the EchoCenter window, change the view to Show Unavailable. Your system administrator may have the section configured for Echoes to not be available immediately. In this case, you should be able to manually set the status of the recording to "Available" through the EchoCenter. If you cannot, contact your system administrator.

**Auto-Publish a Recording**

The Preview Window of Personal Software Capture provides an Auto-publish option, shown in the below figure.

Auto-publish allows you to complete the recording, then walk away from the computer and even close the Software Capture application while the recording is uploaded to the ESS in the background. Be sure the Finalization and Prepare to Publish processes (as noted above) have completed before closing the application.

If you plan to use Auto-publish, keep in mind:

- You cannot review or edit the recording before it is auto-published to the ESS.
- The recording is still saved locally, so you can edit the capture and manually re-publish it later, replacing the original capture, if appropriate.
- Alternately, you can edit the published capture on the ESS if necessary.

**To Auto-publish a recording:**

1) Before you record, check the Auto-publish checkbox, shown in the figure above.

2) When you click Record, one or both of the following happens:

   - If you are not logged in, you will receive a Login dialog box. Enter your ESS login credentials.
A Publishing details dialog box appears, as shown below.

- **Title** - Enter something brief but descriptive enough to identify the subject matter to students.
- **Course** - Use the drop-down list to select the Course/Section to publish the completed recording to.
- **Output** - Use the drop-down list to select the output products to be generated for this capture.
- **Make Available** - If you do not want the recording to be available immediately upon processing, uncheck this box. You may choose to do this if you don’t want students to see the recording until a later date, or you want to add other media or you want to add Lecture Tools materials to the echo.

3) When complete, click **Record**.

4) When you are finished recording, click **Stop**. The recording is published to the ESS immediately.

**Manually Publish a Recording**

To manually publish a recording, hover the mouse over the recording you want to publish and click the **Publish** icon, as shown in the below figure.
Once you click **Publish**, you may be asked to input information or receive messages as follows:

1) If you are not logged in, the Login window appears, asking for your Username and Password.

   ![Login Window](image)

2) If you do not have a Personal Capture license assigned to you, you will receive an error message informing you of this. Contact your system administrator.

3) Once logged in, the Recordings list changes to display the Publishing Details dialog box shown in the below figure.

   ![Publishing Details](image)

4) Enter information about the capture as follows:
   - **Title** - Enter something brief but descriptive enough to identify the subject matter to students.
   - **Course** - Use the drop-down list to select the Course/Section to publish the completed recording to.
   - **Output** - Use the drop-down list to select the output products to be generated for this capture.
   - **Make Available** - If you do not want the recording to be available immediately upon processing, uncheck this box. You may choose to do this if you don’t want students to see the recording until a later date, or you want to add other media or you want to add Lecture Tools materials to the echo.

5) When finished, click **Publish**. You will see a status bar, indicating the status of the file upload to the ESS.