

EchoSystem 5.5 Documentation **Device Monitor User Guide**

August, 2015

Echo360 is continually updating the documentation. This manual is a snapshot as of the date above. Check the Echo360 documentation wiki for the most current version: http://confluence.echo360.com/display/55/EchoSystem+Welcome+and+FAQs

Personal Capture For Windows

On this page:

- Overview
- System Requirements for Personal Capture for Windows



When using PCAP for Windows, be sure that Windows Display Scaling is set to the default of 100% (see Control Panel > Display settings). Windows Display scaling, when enabled, can cause distortion and pixelization of the visual portion of PCAP captures. Refer to the attached image of the Control Panel > Display dialog box if necessary.

Overview

The pages in this guide deal only with the installation and use of Personal Capture for Windows and include the following:

- Install Personal Capture for Windows
- Configure Defaults in Personal Capture for Windows
- Configure Input and Output for Personal Capture for Windows
- Recording Captures with Personal Capture for Windows
- Review and Edit Recordings in Personal Capture for Windows
- Publish Recordings with Personal Capture for Windows

See the Personal Capture For Mac guide for instructions for Mac OS users.

For this and all future upgrades a notice will appear at the bottom of the application window, informing you that an update is available. Clicking the notice launches the upgrade.

System Requirements for Personal Capture for Windows

The following table provides recommendations for using Personal Capture for Windows. These configurations have been tested and verified in house. While we make every attempt to support a wide variety of hardware and devices, we cannot test all devices. Other devices may work, but we cannot guarantee them.

Personal Capture for Windows is *not* supported on netbook computers.

os	Recommended Hardware for Audio and Display or Audio and Video capture (AD or AV)	Recommended Hardware for Audio, Display and Video or Audio, Video, and Video capture (ADV or AVV)	Necessary Software
	AV)	capture (ADV or AVV)	

- Windows 7
- Windows 8/8.1

Intel Core i5 processor or equivalent; 2 GB RAM; 10 /100 network interface; minimum 20 GB free hard disk space.

Internal or external audio device.

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Intel Core i7 processor or equivalent; 2 GB RAM; 10 /100 network interface; minimum 20 GB free hard disk space.

Internal or external audio device.



You cannot create captur e with no audio. If you do not have an audio input (intern al or extern al) you cannot begin recordi

ng.

Windows .NET 3.5 is required. If it is not present, you are prompted to install it.

☑ If Your Capture is Blank

Personal Capture now uses the Windows Media Foundation (WMF) for video capturing. Specifically the cameras should be YUY2 or RGB24 compliant (the camera packaging should indicate this) and supported on a Windows 7 or Windows 8/8.1 platform. If your capture is blank, first check to make sure the camera is attached (if external) and then try an Audio/Video capture. Refer to Test Protocol for Web Cameras for basic instructions. You may also try lowering the output quality of the capture, if you selected High Quality/Large Files. This setting requires significant system resources to process.

Install Personal Capture for Windows

In this section:

- Overview
- Upgrading from Previous Versions
- Download the Installer
- Install the Program

Overview

Personal Capture for Windows is supported on the following operating systems:

- Windows 7
- Windows 8/8.1

You will also want to refer to the <u>Personal Capture For Windows</u> page for the following information:

- <u>Recommended Hardware and Software</u> to ensure your computer has sufficient resources to run the program properly.
- Supported Web Cameras for Personal Capture to determine what cameras you can use for your recordings.

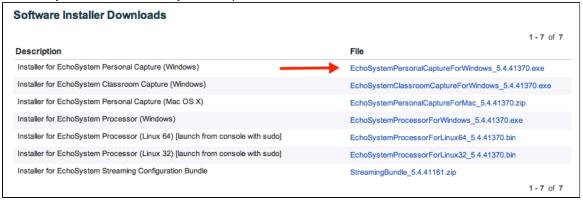
Upgrading from Previous Versions

For both this and all future upgrades, a notice appears in the bottom bar of the program letting you know an update is available. Click on the bar to launch the update.

Download the Installer

Download the Personal Capture installer from the ESS web interface. If you have questions about accessing the ESS, see your ESS System Administrator.

- 1. Log in to the ESS.
- 2. Navigate to the **Downloads** tab.
- 3. Download the installer by selecting the appropriate link, identified in the below figure. The installer must be run locally, so save the file to your computer.



Alternate method: Get the installer directly from your System Administrator and save it to your local machine. In this case, the Administrator downloads the file from the ESS and provides it directly to you.



Use Local Directories for Installation and Capture Storage Directories

For the installation instructions below, note that the Personal Capture installation and data directories *must* be on the local drive; they cannot be located on a network, remote (mapped), or USB thumb drive.

Install the Program

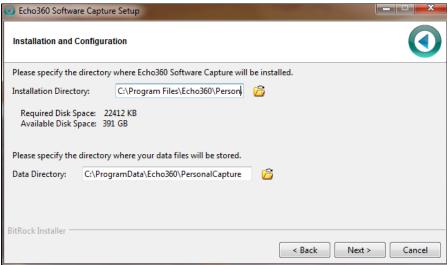


When using PCAP for Windows, be sure that Windows Display Scaling is set to the default of 100% (see Control Panel > Display settings). Windows Display scaling, when enabled, can cause distortion and pixelization of the visual portion of PCAP captures. Refer to the <u>attached image</u> of the Control Panel > Display dialog box if necessary.

Personal Capture requires Microsoft .NET Framework version 3.5 or higher. According to the following article from Microsoft, newer versions of .NET are backwards compatible: http://msdn.microsoft.com/en-us/library/ff602939%28v =vs.110%29.aspx.

If an appropriate version of the .NET framework is not detected, the installer will attempt to download and install it for you. If it cannot be installed, installation will stop.

- 1. Locate the downloaded installer executable and double-click it. This starts the installation process.
- 2. Follow the installation wizard.
- 3. Confirm or change the locations for installation and for capture files, as shown in the below figure, then click **Next**.



- 4. Continue through the installation wizard. When complete, click **Finish** to close the installer.
- 5. If you installed the .NET Framework during installation, or other registry changes were required, **you may be prompted to restart the computer**. Be sure to do so, as Personal Capture may fail until you restart the machine.



Please Note

Please note that even if you already have .NET 4.0 installed, you may still be required to install .NET 3.5.

Configure Defaults in Personal Capture for Windows

In this section:

- Overview
- Configure Login
- Configure ESS Settings

Overview

Two things are required to publish a capture generated with Personal Capture (PCAP):

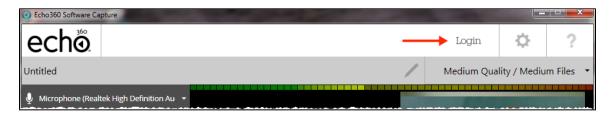
- Valid login for a <u>licensed user</u>,
- The URL of the EchoSystem Server (ESS) to which the capture is to be published.

Configure these items for Personal 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 Personal Capture window, shown in the below figure. The credentials you enter 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 Personal 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

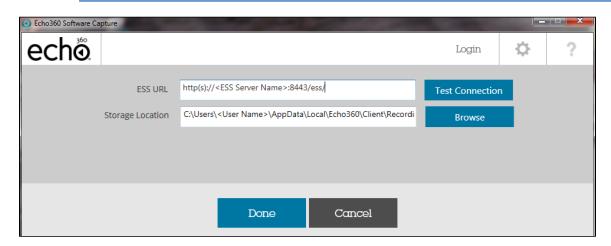
Click the **Settings** button at the top of the Personal Capture window, identified in the below figure (it looks like a gear).



Use the dialog box, shown below, to enter the following information:

- **ESS URL:** The Hostname and Port number of the ESS to which you will publish captures. If this field reads a dummy address (https://None:None/ess), you will need to manually enter the information. For example: https://EchoServer.institution.edu:8443/ess/.
 - If you ever log into the ESS to manage your echoes or upload media, this is the same URL you use for that
 - You may also be able to use the first segment of the URL for your course EchoCenters, if your institution does not use an LMS.
 - >Click **Test Connection** to be sure the information you enter is accurate.
 - Contact your System Administrator if you need assistance. See also the note below.
- **Storage Location:** Identifies the location on the local machine where capture files are stored. Click **Browse** to change this at any time.
 - **1** Use Local Directory for Capture Storage Location

The Personal Capture storage location *must* be on the local drive; it cannot be located on a network, remote (mapped), or USB thumb drive.



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



Try a different HTTPS port number

If you believe the Hostname/URL for the ESS is correct but you still cannot connect, try changing the port number from 443 to 8443 or vice versa. Personal Capture always connects to the ESS via HTTPS, and the default HTTPS port settings are 8443 or 443, depending on the deployment. If you still cannot connect, contact your System Administrator.

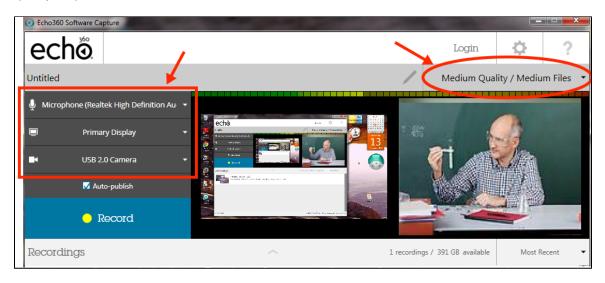
Configure Input and Output for Personal Capture for Windows

In this section:

- Overview
- Select Input for Recording
- Select Output Quality for Capture

Overview

Personal 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.



The input and output selections you make are retained, even after you close the program. This means you can configure these settings once and use the same ones each time you create a recording, without the need to re-select them.

Select Input for Recording

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

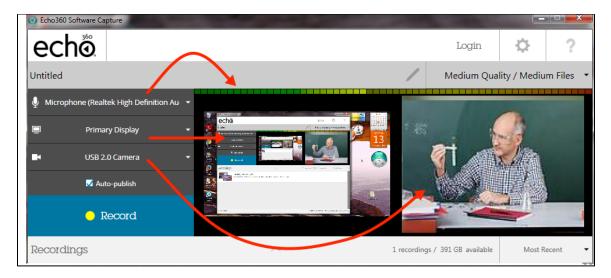
- Audio only capturing only audio input. This will generate an MP3 file for students to listen to.
- Audio and Video (A/V) capturing sound and video input from the built in or USB-connected video camera.
- Audio and Display (A/D) capturing sound and whatever is shown on the computer screen.
- Audio,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

Use the three drop-down lists, identified in the above picture on the left side of the screen, to select the inputs you want to use. Choose **None Selected** if applicable to that input.

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. Personal 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.



- 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 subsquently 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 Personal 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 Personal 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.

Recording Captures with Personal Capture for Windows

In this section:

- Overview
- Creating a Recording
- Deleting a Recording

Overview

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

Personal 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.

A

When using PCAP for Windows, be sure that Windows Display Scaling is set to the default of 100% (see Control Panel > Display settings). Windows Display scaling, when enabled, can cause distortion and pixelization of the visual portion of PCAP captures. Refer to the <u>attached image</u> of the Control Panel > Display dialog box if necessary.

Creating a Recording

To begin creating a Personal Capture recording:

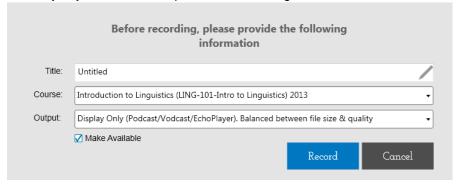
- 1. Enter a **Title** for the recording using the title bar at the top of the page. You can change this later if needed.
- 2. Check or set the <u>capture inputs</u>. Use the Preview window to make sure they are capturing what you need to include in the recording.
- 3. Check or set the capture output 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. Check or Uncheck Auto-Publish as appropriate.
- 6. Click Record.

The locations for performing each of these steps is identified in the below figure.



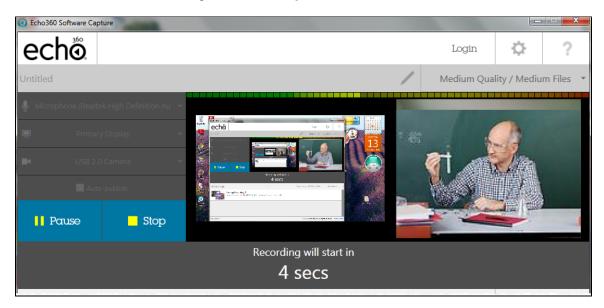
After you click Record:

 If Auto-publish is checked, the following dialog box appears asking you to enter a **Title**, select a **Course**, and the **Output** you want for the published recording.



- A five second countdown appears in the window, shown in the below figure.
- Once the countdown finishes, recording begins and the preview window minimizes to the taskbar.

• The Record button changes to show Stop and Pause.



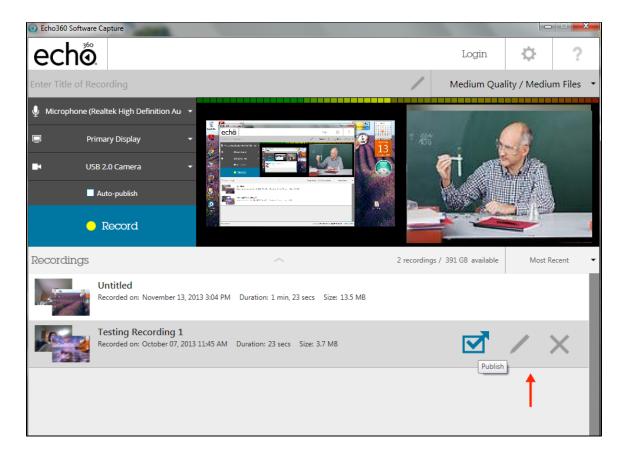
You can use the **Stop** and **Pause** buttons in the interface to manipulate the recording, or you can use the keyboard shortcuts as follows:

Pause/Resume toggle: Alt+F5

• Stop: Alt+F6

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

If the **Auto-publish** was checked, the capture is also automatically published to the ESS when you stop recording. Be advised, however, that if Auto-publish is checked, you cannot <u>review or edit the recording</u> 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. Or you can <u>edit the published capture on the ESS</u> if needed.

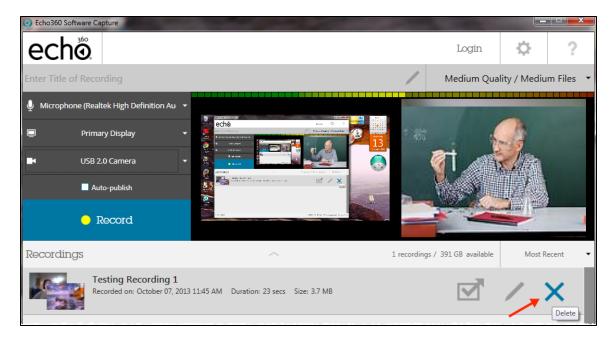


Deleting a Recording

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

Deleting a recording in Personal 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 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 Recordings in Personal Capture for Windows

In this section:

- Overview
- Access the Editing Window
- Review the Recording
- Trim the Recording
- Cut Segments From the Recording

Overview

The Personal 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 Personal 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 <u>manually re-publish the capture</u>, replacing the original, if appropriate.

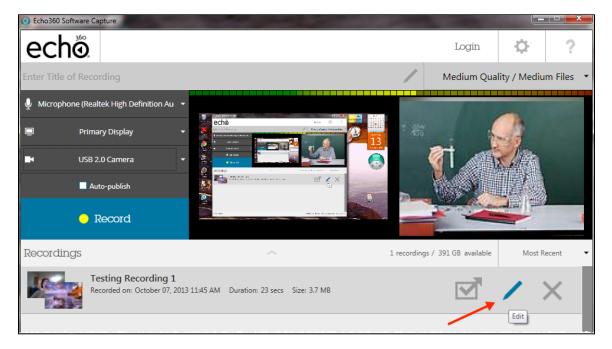
If your institution has integrated Lecture Tools with EchoSystem, you can also <u>add Lecture Tools materials to a published Personal Capture recording</u>, to provide students with pre-class exercises, such as polls or quizzes. Student responses can then be discussed in class.

1 Long Recordings Take Time to Load for Editing

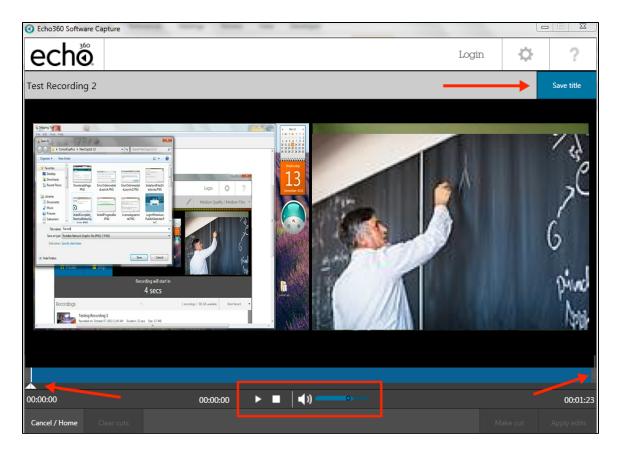
If you are editing a very long recording (multiple hours) it may take up to several minutes for the capture to fully load in the Editing Window. You will see the capture in the window, along with the editing tools, and you can make temporary cuts or trim the recording as needed. However you may notice 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 Personal 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, as shown in the below figure.



The Edit Window appears, as shown in the below figure. The figure also identifies the main editing window features, which are discussed in more detail in the later sections on this page.



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.

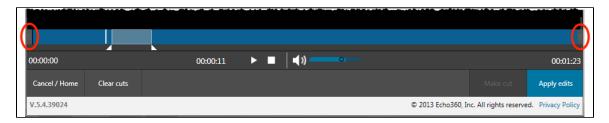
When the playhead gets to a cut location (identified as the lighter area in the playback bar), the playhead will skip over the cut in the bar, and the timed location will change in conjunction with the skip.

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 Personal Capture window and clicking Stop to end the session. This too can be trimmed from the final capture.



The figure above has the trim sliders circled. Notice they are located at the beginning and end of the playback bar.

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

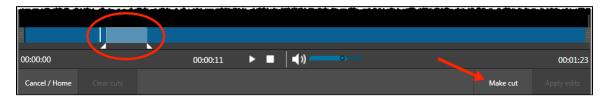
When you first open the Edit window, you see a larger triangle positioned at the beginning of the recording. If you click the triangle and slide it, you will notice that it is made up of two smaller triangles. These are cut markers and are used to identify the beginning and end points of a section to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



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.



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 <u>review your edited recording</u>. 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.

Publish Recordings with Personal Capture for Windows

In this section:

- Overview
- Auto-Publish a Recording
- Manually Publishing a Recording

Overview

Publishing a Personal 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 <u>add Lecture Tools materials to a published Personal Capture recording</u>, 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 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 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 Personal 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.



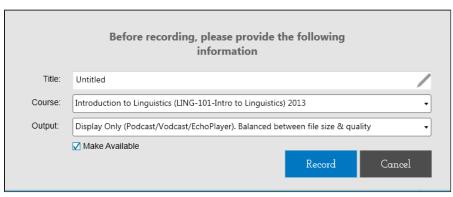
If you plan to use Auto-publish, keep in mind:

- 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 re-publish it later, replacing the original capture, if appropriate.
- Alternately, you can <u>edit the published capture on the ESS</u> 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, asking you for a **Title**, the **Course** to publish
 the recording to, and the **Output** to generate for the recording (formerly called Product Group).
 - Check or Uncheck the Make Available checkbox. This determines whether the recording is immediately available for students. If unchecked, you can use the EchoCenter to make the recording

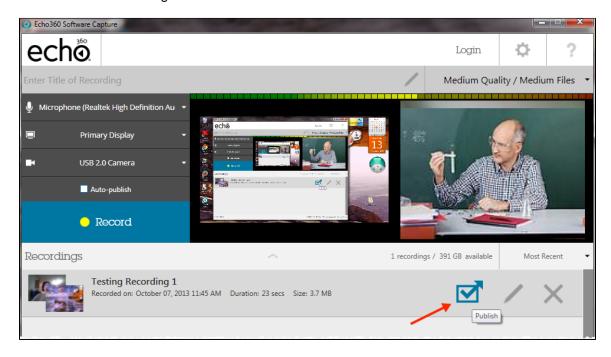
available at a later time.



- 3. When complete, click Record.
- 4. When you are finished recording, click **Stop**. The recording is published to the ESS immediately.

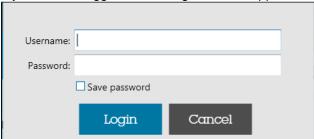
Manually Publishing a Recording

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:

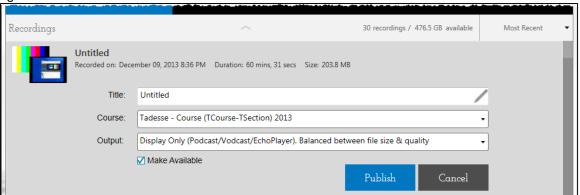
1. If you are not logged in, the Login window appears, asking for your Username and Password.



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.



- 4. Enter a **Title**, select the **Course** to publish the recording to, and the **Output** products to generate for the recording (formerly called Product Group).
- 5. Check or Uncheck the **Make Available** checkbox. This determines whether the recording is immediately available for students. If unchecked, you can use the EchoCenter to make the recording available at a later time.
- 6. When finished, click Publish. You will see a status bar, indicating the status of the file upload to the ESS.