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

Academic Staff Guide

Classroom Capture for Academic Staff

In this section:

Overview

Clasroom Capture is a Windows-only application suited for audio, video, and local screen capture from a dedicated podium or lectern PC inside the classroom.

Once Classroom Capture is installed and configured, Academic Staff can use it to view the status of or manipulate scheduled recordings and capture ad hoc lectures as needed.

Classroom Capture is accessed through the Start menu, as shown in the below figure, or may be available via a shortcut icon located on the desktop.
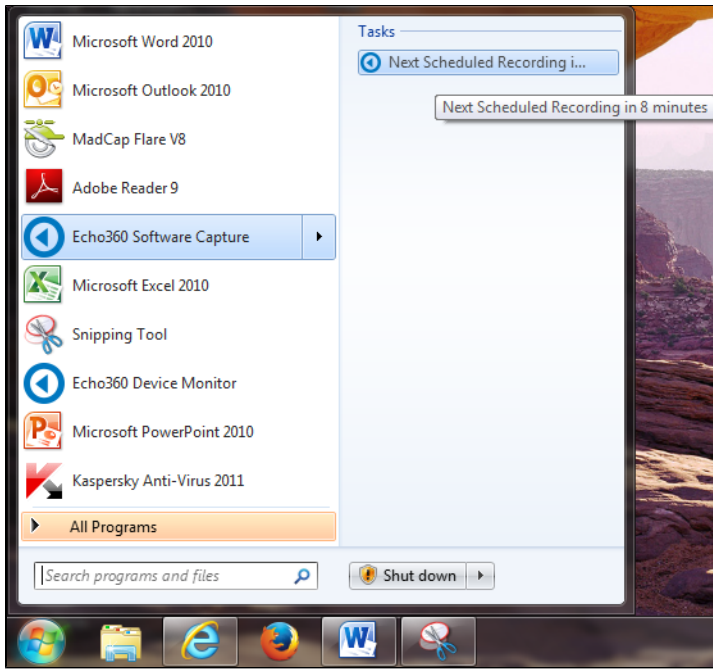
Notice how the Start Menu option indicates an upcoming scheduled recording. This message appears whenever there are 10 minutes or less until the next scheduled recording. The remaining sections of this page provide instructions on manipulating a scheduled capture and recording an ad hoc capture through the Classroom Capture interface.

> ⚠ **Classroom PC Must Be On and User MUST Be Logged In**
>
> The Classroom Capture service is configured to start when Windows starts; it will capture scheduled classroom lectures without the program being open. You only need to open Classroom Capture if you want to manipulate the scheduled recording. HOWEVER, the following must be done order for Classroom Capture to record a scheduled lecture:
>
> - The podium PC **must** be on
> - A user **must be logged in**
>
> This allows scheduled captures to begin at the predetermined time. Furthermore, if the user logs out during the capture, **the capture will stop at that point**.
>
> The **best practice** is to have the podium PC continuously logged in to a shared account.
>
> An **alternate practice** is for Presenters (the Instructors or Teaching Assistants) to log in to the PC as soon as they enter the classroom and **before** the capture is scheduled to begin. The allows the PC to complete the login process and begin recording the lecture. In this case, be sure the Presenter logs out **before** the scheduled start of the next capture, particularly where back-to-back captures are scheduled.

Classroom Capture and Ad Hoc Recordings

Classroom Capture allows you to easily start and control ad hoc recordings through the Classroom Capture interface.

If there is a Device Monitor light installed on the podium PC, it can also be used to start and control an ad hoc capture as well as indicate the current status of the recording. See Installing and Using the Device Monitor for more

information.

To open Classroom Capture:

- Select **Echo360 Software Capture** from the Start menu.
- Double-click the **desktop icon** if available.

If there are no scheduled recordings about to begin, the Classroom Capture "preview window" appears, previewing the items being captured by the selected inputs. Classroom Capture allows you to select what inputs you want to capture for each recording, and the output quality for the processed capture. The below figure identifies the locations of these drop-down selection lists.
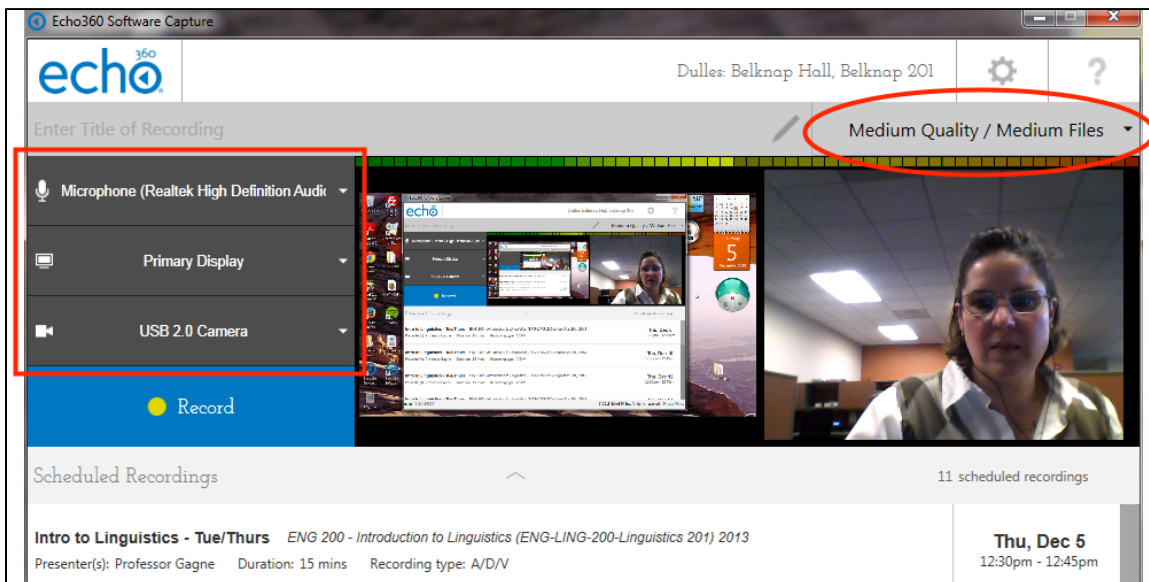
Configuring capture inputs and output and creating a recording are discussed in the next sections. The below features are ONLY available for ad hoc recordings. You cannot adjust input or output for Scheduled recordings.

> ℹ️ **Input/Output Settings are Maintained for Each PC User Login**
>
> The input and output settings you configure are maintained on a per-user basis. This means that every time you log into the Podium PC and open Classroom Capture, the selections you made the last time will appear. This allows you to consistently use the same inputs for ad hoc captures without having to re-set them each time.

Configure Ad Hoc Capture Inputs

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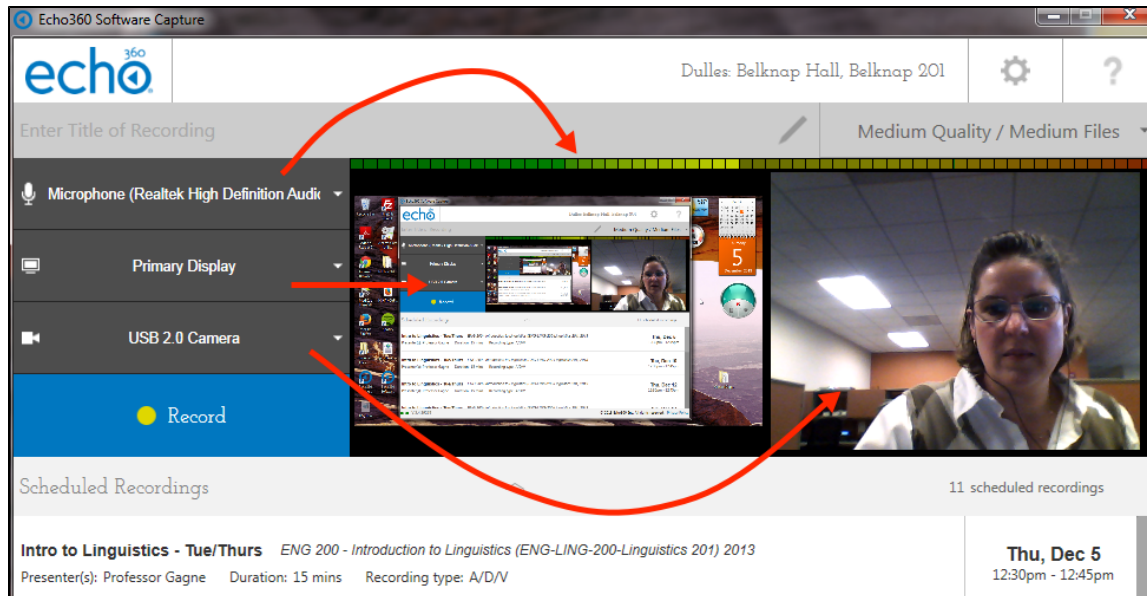
- **Microphone Input** is shown in the light-bar above the preview panes. If you do NOT see this bar changing as sounds are made, check your microphone connection and functionality. *If the sound bar on the screen is not registering sounds, your capture may not have audio.*

- **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.

Configure 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 earlier on 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 uploaded to the ESS subsequently 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 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 the podium PC 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.
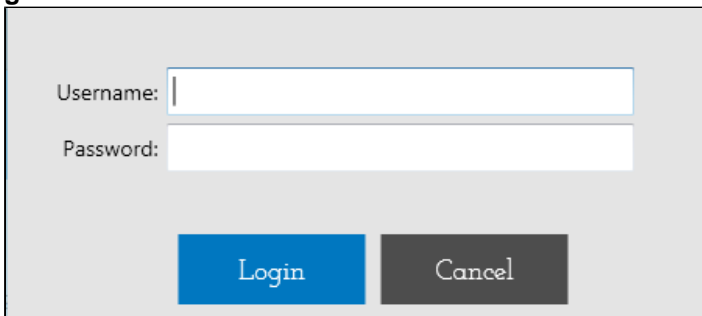
Start an Ad Hoc Capture

When you begin an ad hoc recording, you are asked for your login credentials, then to specify a Title, Output products (product group), and the Course/Section to publish the recording to. This allows Classroom Capture to immediately begin uploading and processing the capture as soon as you are finished.
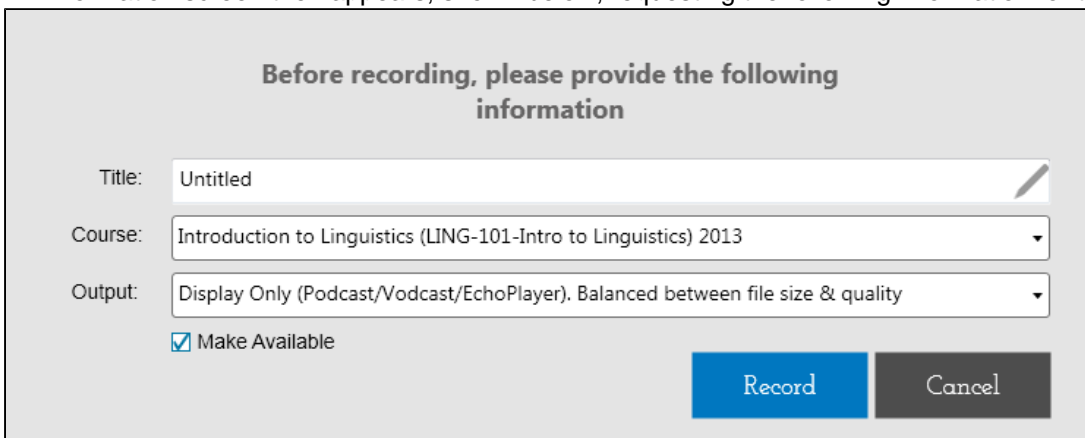
Alternately, you can use the Device Monitor light to start an ad hoc capture, if one is installed on the podium PC.

To begin a Classroom Capture ad hoc recording:

1. Check or set the capture inputs. Use the Preview window to make sure they are capturing what you need to include in the recording.
2. Check or set the capture output quality.
3. Set up the presentation or visual experiment or other items you are planning to capture, and check the Preview panes for verification.
4. Click **Record**.
5. A Login screen may appear, shown below, requesting an instructor login. Enter your credentials and click **Login**.

6. An information screen then appears, shown below, requesting the following information for the capture:

   - **Title** - Enter something brief but descriptive enough to identify the subject matter to students. If a generic login is used, use the title to note the course or section for this capture.
   - **Course** - Use the drop-down list to select the Course/Section to publish the completed ad hoc

recording to. If a generic instructor login is used, you will not see this option.
- **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 not present 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.

7. When finished, click **Record**. After you click record:
    - A five second countdown appears in the window.
    - Once the countdown finishes, recording begins and the preview window minimizes to the Windows Taskbar.
    - The Record button changes to show **Pause** and **Stop**.

Pause and Resume a Capture

Both scheduled captures and ad hoc captures allow you to pause and resume the capture while recording. There are multiple ways to pause and resume a capture, each described below.

Alternately, you can tap the Device Monitor light to pause and resume the capture, if one is installed on the PC.

To pause/resume using the keyboard command:

- Press **Alt+F5**

The keyboard command is a "toggle" function, meaning the same combination both pauses an active recording and resumes a paused recording.

This method allows you to manipulate the recording without having to open the program or capture unnecessary display items in the recording.

To pause/resume from the Classroom Capture window:

1. Open the Classroom Capture window by:
    - Selecting **Echo360 Software Capture** from the Start menu to open the program;
    - If the program is open, click the **Classroom Capture icon** from the Taskbar, shown below, to maximize the window.

2. Click the **Pause** button on the left side of the window, shown in the below figure. Once paused, the button changes to Resume.
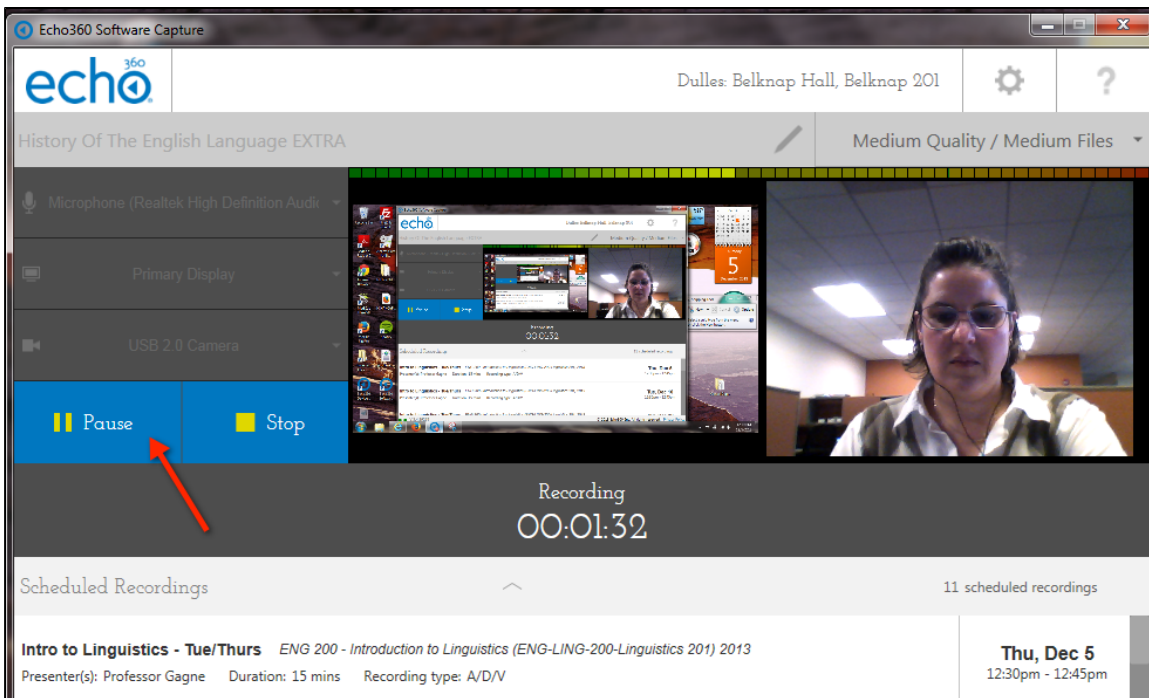
3. When appropriate, click the **Resume** button to continue recording. You will want to minimize the window after recording resumes.

Stop a Capture

Both scheduled captures and ad hoc captures allow you to stop the recording when you are finished. Once a capture is stopped, it cannot be re-started. Classroom Capture immediate begins processing and uploading the recording to the ESS.

Scheduled recordings stop automatically when the scheduled end-time is reached. However if your class is finished early, you can manually stop the capture to eliminate the unnecessary recording time and resources.

There are multiple ways to stop a capture, each described below. **Alternately**, you can press and hold the Device Monitor light for two seconds to stop the capture, if one is installed on the PC.

To stop the capture using the keyboard command:

- Press **Alt+F6**

This method allows you to stop the recording without having to open the program or capture unnecessary display items in the recording.
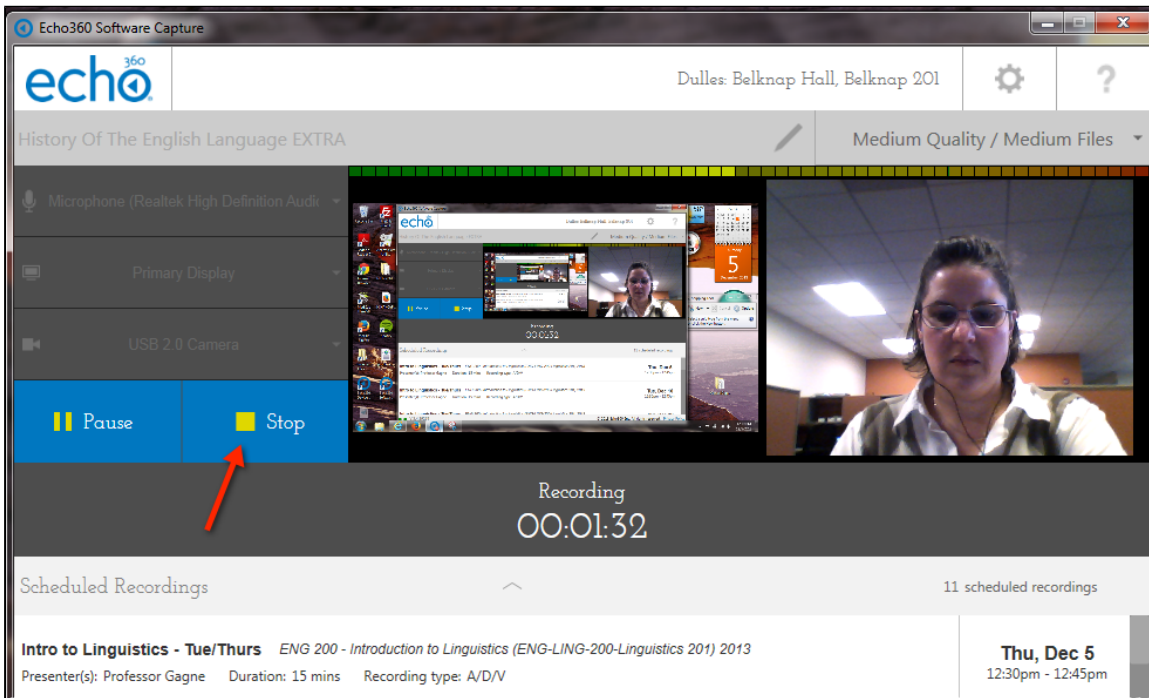
To stop a capture from the Classroom Capture window:

1. Open the Classroom Capture window by:
    - Selecting **Echo360 Software Capture** from the Start menu to open the program;
    - If the program is open, click the **Classroom Capture icon** from the Taskbar, shown below, to maximize the window.
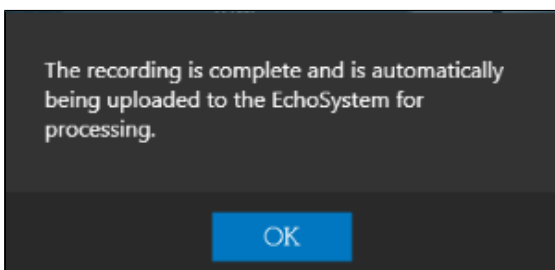
2. Click the **Stop** button on the left side of the window, shown in the below figure.

3. After stopping, you will receive a notification shown in the below figure, letting you know that the capture is being uploaded for processing.

While uploading of a capture does happen automatically, please note the following about the publishing process:

- 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.
- 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.

Controlling Scheduled Recordings

As stated in the Overview above, you (the Instructor) don't have to do anything for Classroom Capture to record scheduled classroom lectures, except make sure the PC is on and that a user is logged in. However, you can open the program to check the time left in the recording, or to manipulate the recording by:

- [Start the capture early](#)
- [Extend the capture](#)
- [Pause and Resume the capture](#)
- [Stop the capture early](#)

Start Early and Extend are only available for Scheduled recordings and do not apply to ad hoc recordings. Pause, Resume, and Stop apply to any type of Classroom Capture recording.

If there is a Device Monitor light installed on the podium PC, it can also be used to control a Scheduled capture (Pause, Resume, Extend, and Stop) as well as indicate the current status of the recording. See [Installing and Using the Device Monitor](#) for more information.

Start a Capture Early

If a scheduled recording is within 10 minutes of starting, Classroom Capture allows you to start the recording early. This may by useful if you know your lecture or class activities will take up all of the normally scheduled time.

Use the **Start Menu** or **desktop icon** to open Classroom Capture. If the program is already running, click the **Taskb ar icon** to maximize the Classroom Capture window.

During the period prior to a scheduled capture, called "pre-roll", the Classroom Capture window will appear as shown in the below figure.
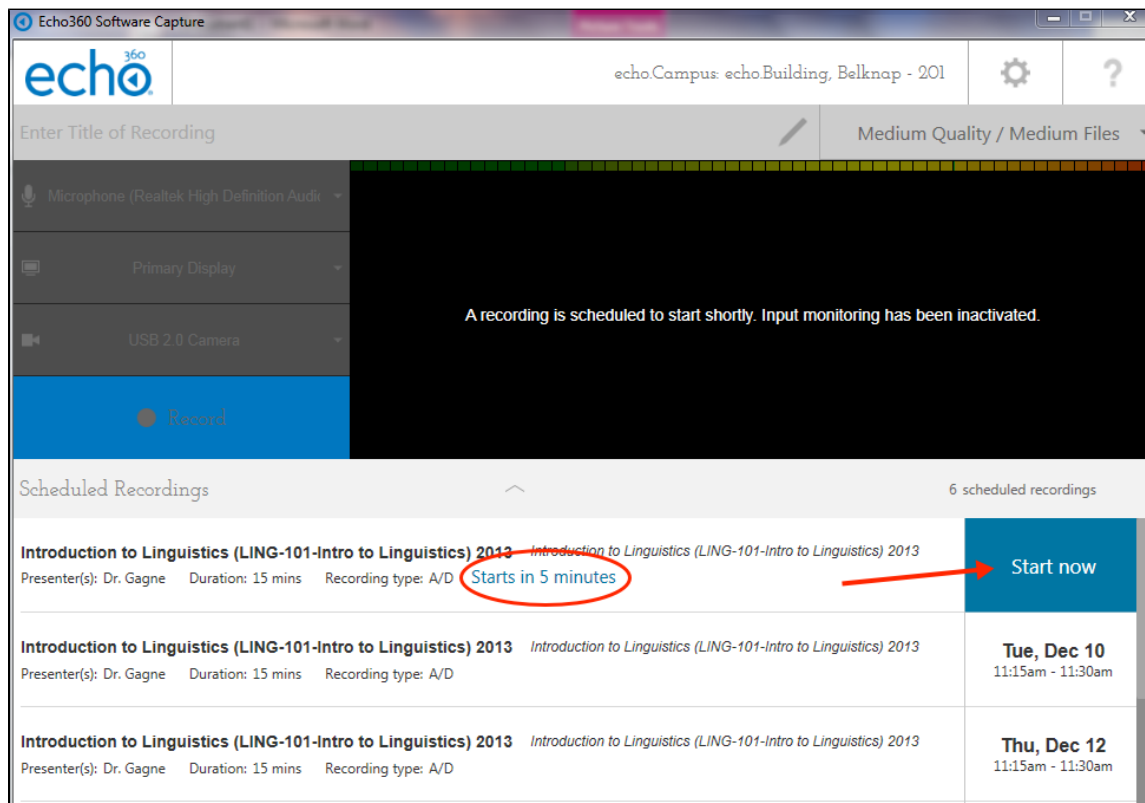
The pre-roll window indicates how long until the next scheduled recording is to begin, and provides a **Start now** butt on to start the capture early.

Once you click **Start now**, you will receive a countdown timer (default is 5 seconds) after which the capture begins.

The Classroom Capture window minimizes and the current status of the recording is shown in the [Windows Taskbar Capture Status Indicator](#).

Extend a Capture

At any time during a scheduled recording, Classroom Capture allows you to extend the capture by 10 minutes. This may be useful if you know your lecture or class activities will go beyond the normally scheduled end-time.

Use the **Start Menu** or **desktop icon** to open Classroom Capture. If the program is already running, click the **Taskbar icon** to maximize the Classroom Capture window.

While the program is recording, the Classroom Capture window, shown in the below figure, provides a variety of control options, including a button to add time.
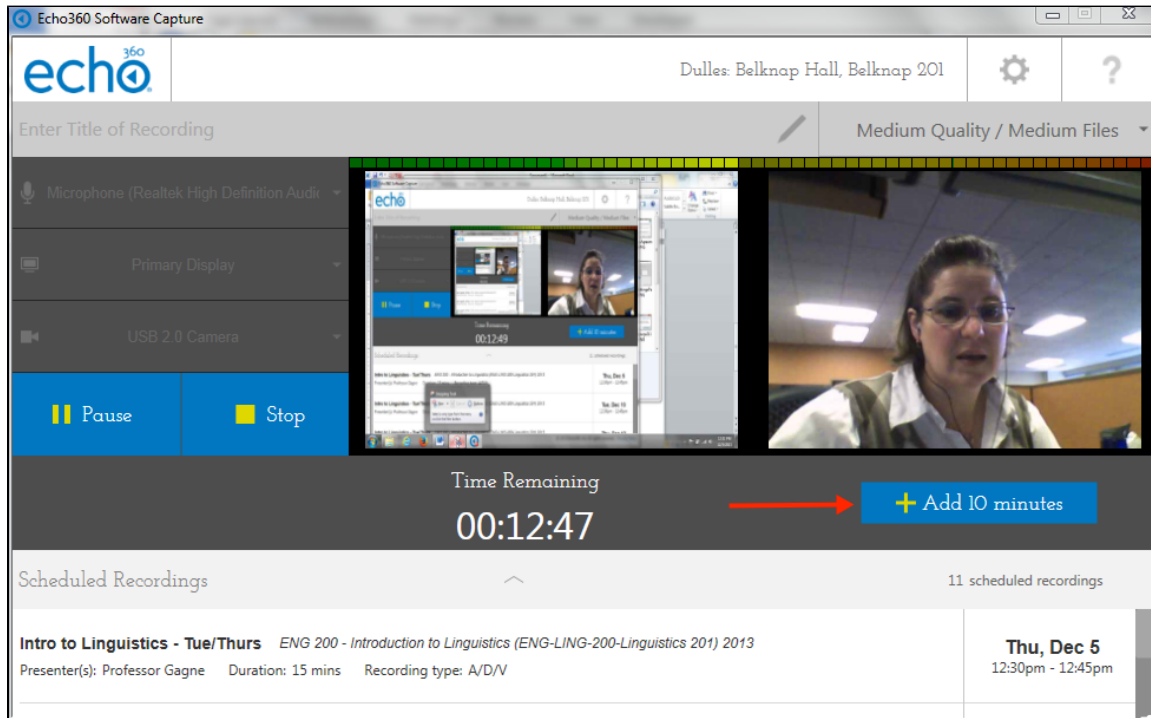
Click **Add 10 minutes** to extend the capture. The Time Remaining shown on the screen will increase by 10 minutes. You can then minimize the window to continue using the PC display if necessary.

Clicking the button again adds another 10 minutes to the capture. Repeat to extend the capture as long as necessary. See note below.

> ⚠ **Captures Cannot be Extended Into Next Scheduled Capture**
>
> You cannot extend any capture beyond the start time of the NEXT scheduled capture. While the system will allow you to add time as described above, the capture will automatically end one minute prior to the start of the next scheduled capture (to allow the system to perform the preparation tasks required for the next capture). ad hoc captures are automatically stopped five minutes prior to the next scheduled capture.

Windows Taskbar Capture Status Indicator

When the program is open, the Classroom Capture icon in the Windows Taskbar shows the status of the recording. For example, the below figure shows the Taskbar icon with a red dot, indicating that Classroom Capture is currently recording.

Pausing the capture changes the Taskbar icon to show a pause symbol, as shown in the below figure.

If there is a Device Monitor light installed on the podium PC, it will also indicate the current status of the capture. See Installing and Using the Device Monitor for more information.

> ✅ **Do Not Use Small Icons on Taskbar**
>
> If you are not seeing the capture status indicated in the Windows Task bar as described here, right-click the Taskbar and check the Taskbar Properties. If the **Use small icons** checkbox is checked, clear it, as shown in the below figure. Small icons do not allow for the "overlay" graphics (pause sign or red dot) that Echo uses for the status indicator.
>
>
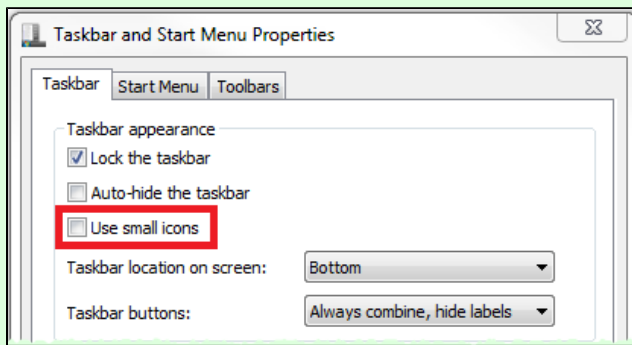
EchoCenter for Academic Staff

In this section:

- Overview
- Do You Have All the Features?
- EchoCenter for Teaching Assistants
- EchoCenter for Students
- Overview on Views and EchoCenter Analytics
- Trouble Logging In
- Learn More

Overview

EchoCenter (shown below) is a convenient, intuitive dashboard that you can use to:

- Access materials. All **materials** (Echoes, media imports, and Personal Capture recordings) are grouped together by date and lecture.
- Access **Lecture Tools** to prepare and publish activities, polls, and quizzes for use in classroom lectures (if Lecture Tools has been integrated with EchoSystem).
- Guide student **discussions**. You can introduce a topic at the right teaching moment. See Discussions - What

Did Students Learn?
- Gain **insight** into student learning. See Teaching Aids - What Did Students Watch? You can learn:
    - What Echoes students watched and how closely they watched
    - What was interesting, confusing, or notable
    - What they ignored
    - What they absorbed

This overview suggests some ways you can use the EchoCenter. You can also delegate some tasks to your Teaching Assistant (TA).
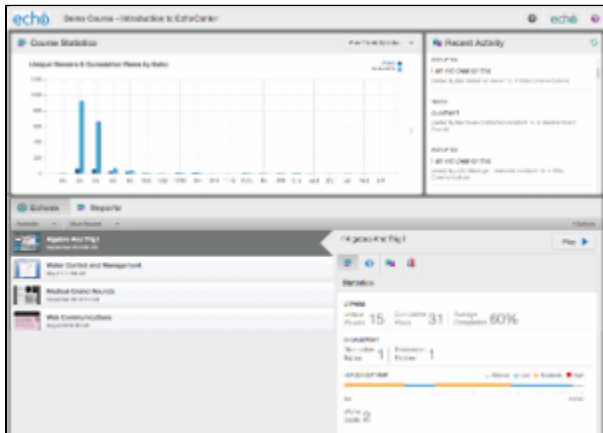
Click for larger image.

Do You Have All the Features?

When the EchoSystem requires a login to authenticate users, you see an EchoCenter page that has panes for course statistics, discussions (called "Recent Activity"), and additional information for each Echo. There may also be links to a Lecture Tools system allowing you create polling questions or quizzes for use during class. The page looks something like the figure shown above.

When the EchoSystem is not authenticating users, you still see an EchoCenter page, but it is missing the valuable teaching aids. It looks similar to the figure below:

If your EchoCenter page looks like this, take a screenshot and show it to your System Administrator. This occurs when the EchoCenter is not authenticating users. It may be possible for your System Administrator to set up the EchoCenter for authentication, giving you access to the teaching aids.

EchoCenter for Teaching Assistants

If you are a TA, you can view this page for the section assigned to you. You might use this page to:

- **Access a live webcast**. During a live webcast, the Instructor might ask you to monitor chat and present

questions for response. See [Live Webcasting for Academic Staff](#).
- Assist with **presenting Lecture Tools materials** and polls, especially during Live webcasts. see [Using Lecture Tools with EchoCenter](#).
- **Monitor and guide student discussions**. You can look at the Recent Activity pane to see the most recent discussion comments elicited by any Echo, or look at the discussion threads for a particular Echo. See [Discussions - What Did Students Learn?](#)
- **Analyze data presented in the teaching aids**, then prepare a high-level summary for the Instructor. See [Teaching Aids - What Did Students Watch?](#) Your Instructor might want to know:
    - Which Echo received the most views
    - Which Echo was viewed multiple times by the same student
    - Which topic inspired the most discussion
    - Which discussions revealed understanding
    - Which discussions revealed confusion
- **Analyze engagement data**. You may want to identify students who are not participating and who may be falling behind. You may also want to include online activity in course assessment, giving active students credit for their participation. See [Student Usage Reports - Are Students Engaged?](#)

EchoCenter for Students

Your students also have an EchoCenter page, but they do not see the teaching aids you see. They use the page to:

- Access a Live webcast
- Access a particular Echo, media import, or Personal Capture recording
- Review discussions and participate in them
- Access any lectures where Lecture Tools polls or questions have been added. Students MUST access the EchoPlayer through the EchoCenter to see these items.
- See the course bookmarks they have added to particular Echoes

The student EchoCenter page looks similar to the figure below:

*Click for larger image.*

Overview on Views and EchoCenter Analytics

For an overview of how EchoCenter Analytics are calculated and displayed, please visit: [Overview of Views and EchoCenter Analytics](#)

Trouble Logging In

In certain rare circumstances you will find that you cannot log in to an EchoCenter page, although you were able to

at other times.

This can occur if your school's security system is configured in a particular way.

Follow these steps.

1. If you have a learning management system (LMS), such as BlackBoard or Moodle, log in to the LMS first, then try to access the EchoCenter page.
    - If you have BlackBoard or Moodle, there may be an EchoCenter link on the LMS page
    - If you have another LMS, log in to it first, then to the EchoCenter page

2. If this does not work, call your school's Help Desk.

Learn More

See these pages for further details:

- [Teaching Aids - What Did Students Watch?](#)
- [Discussions - What Did Students Learn?](#)
- [Student Usage Reports - Are Students Engaged?](#)
- [Improve Learning - Add Descriptions for Each Echo](#)
- [Other Items on the EchoCenter Page](#)
- [Using Lecture Tools with EchoCenter](#)

Teaching Aids - What Did Students Watch?

In this section:

- [Overview](#)
- [Overview on Views and EchoCenter Analytics](#)
- [Course Statistics](#)
- [Viewing Analytics](#)
- [Engagement Analytics](#)
- [Usage Heat Maps](#)

Overview

The teaching aids can help you understand student behavior.

Overview on Views and EchoCenter Analytics

For an overview of how EchoCenter Analytics are calculated and displayed, please visit: [Overview of Views and EchoCenter Analytics](#)

Course Statistics

The **course statistics** show you views by Echo and by week.

How Do I Use Course Statistics?

Select the **View Trends By Echo** option in the drop-down list to see how many times an Echo was viewed and the number of unique viewers. In the bar graph below, we see that the Echoes of April 17 (4/17) and April 30 (4/30) had far more viewers than typical. There may be discussion questions in these Echoes that are worth reviewing.
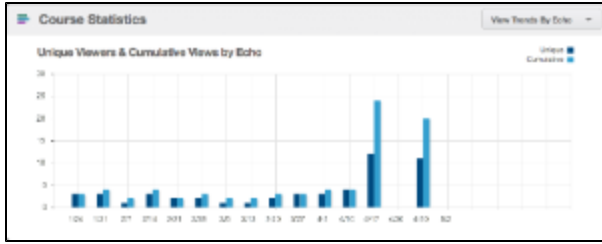
Select the **View Trends By Week** option in the drop-down list to see how many Echoes were viewed by week and the number of unique viewers. You will probably see an upsurge in viewing the week before an exam.

Several features let you see details and adjust the graph:

- **See details**. Hover over a bar to see a pop-up with details about the number of views, as shown below
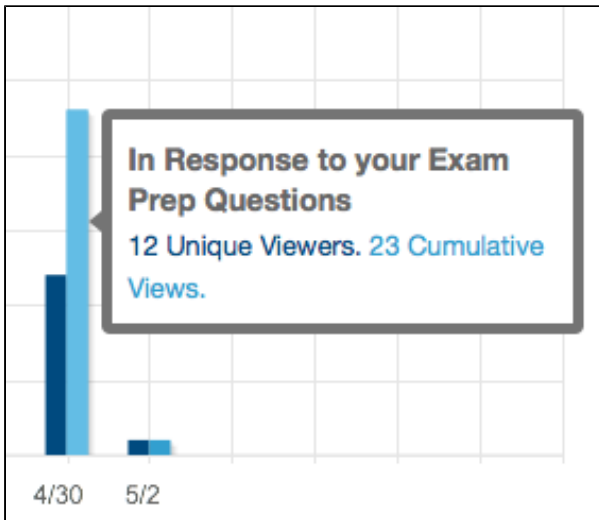

- **Focus** on a particular part of the graph. Click one part of the graph and drag to zoom, revealing detail. Double-click to restore the normal view. The screenshot below shows the graph at the normal zoom level, then zoomed in to show detail. Notice how the vertical axis of the zoomed graph is more granular, helping you to perceive details.
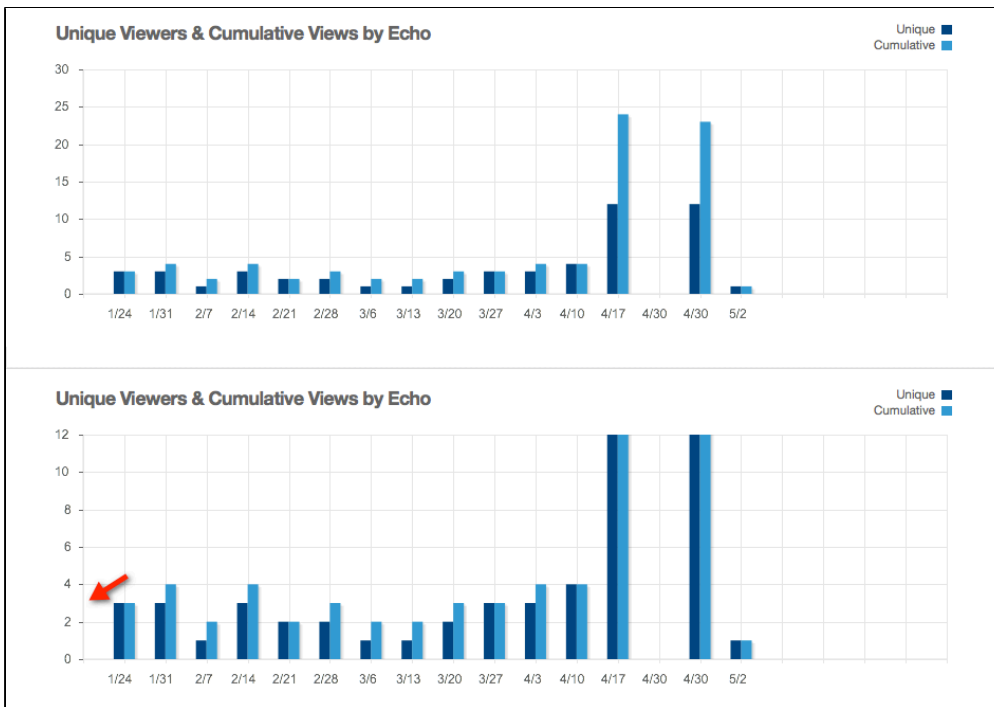
- See **earlier and later dates**. Click the arrows on the left or right side of the graph to scroll the area displayed.
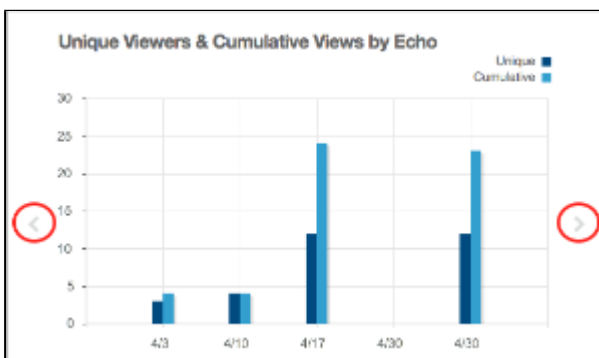
What Counts as a "View" When Compiling Course Statistics?

You may notice a discrepancy between what your students tell you and what the course statistics tell you. An entire class (of, say, 250 students) may claim to have viewed an Echo. Yet the course statistics may show many fewer views. What accounts for the discrepancy?

- When a student plays the Echo using the EchoPlayer, the view is counted when course statistics are compiled.
- When a student downloads the Echo instead of using the EchoPlayer, the view is **not** counted when course statistics are compiled.
- When a student views an Echo on a mobile device, the view is **not** counted when course statistics are compiled.

Viewing Analytics

Viewing analytics present quantitative data for a particular Echo.

Average Completion helps you gauge the level of student viewing of this Echo relative to other Echoes. Say that

student A watches the entire Echo (every scene), generating a completion rate of 100%. Student B watches only half of the scenes, generating a completion rate of 50%. If no other students watch the Echo, the **Average Completion** is 75%. You might want to watch this parameter during the term, querying if the completion rate for a particular Echo is very high or very low.

1. Select the Echo you want to analyze.
2. Click the Analytics tab.
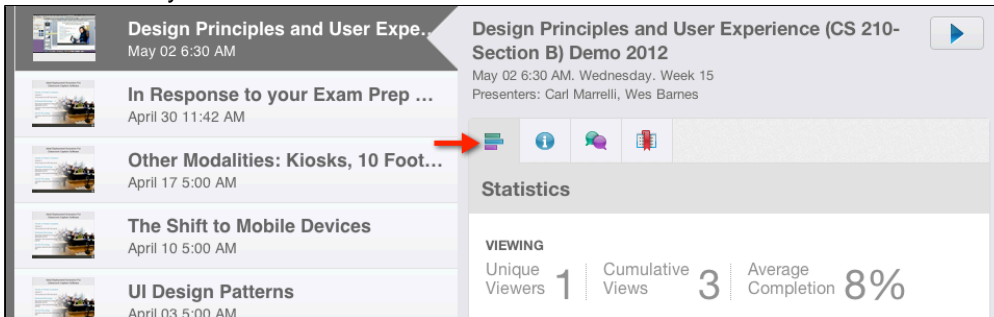
> ℹ️ **How is average viewing completed calculated?**
>
> Our analytics service (known as HEMS) divides a recording into segments for analytic purposes and keeps track of how many times users cross segment boundaries. To calculate average viewing completion, HEMS returns the total number of segments viewed divided by the number of cumulative views per recording. The EchoCenter uses that number to calculate the % viewed based on the total number of segments per presentation.

Engagement Analytics

Engagement analytics give you a quantitative view of **student interest in a particular Echo**. This is different from the student usage reports, which show a **particular student's engagement in the course**.

1. Select the Echo you want to analyze.
2. Click the Analytics tab (marked "1" in the figure below) to display viewing and engagement analytics.
3. In this example, the Echo generated one discussion topic with one reply. Discussions do not always show this one to one correspondence. You could have, for example, four topics and six replies. The replies can be distributed among the topics or one topic can generate all of the replies.
4. Click the Discussions tab (marked "2" in the figure below) to display the discussions.
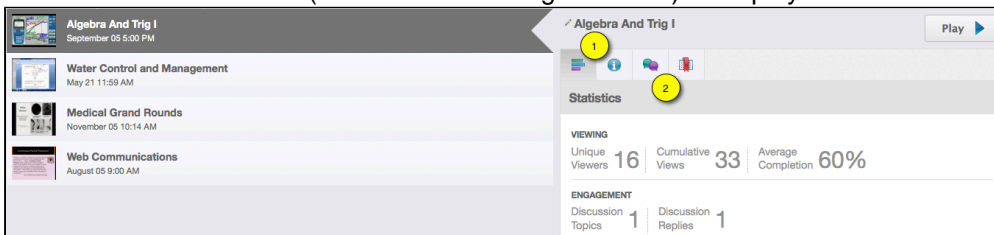
Usage Heat Maps

Heat maps illustrate student reaction to an Echo. A color-coded line shows what segments of an Echo students found:

- Most interesting ("hot spots")

- Somewhat interesting ("warm spots")
- Less interesting

USAGE HEAT MAP — Minimal ■ Low ■ Moderate ■ High

0:00   00:49:59

Hot Spots 3   Warm Spots 7
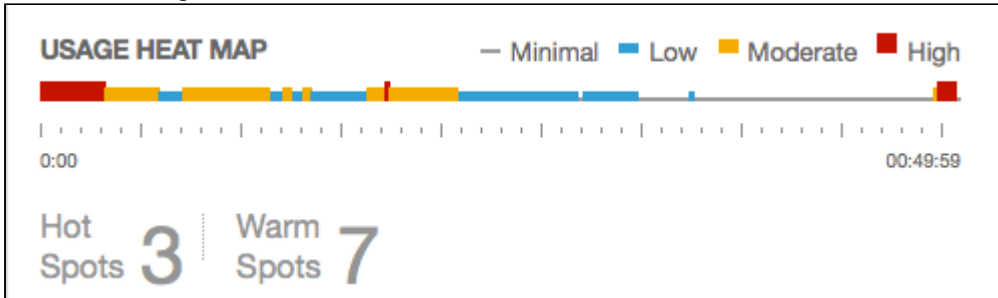
Text below the map calls out the number of hot and warm spots.

Clicking on the heat map opens the Echo to that segment.

When you hover your cursor over parts of the heat map line, a yellow tooltip:

- Indicates the segment in the Echo. In the example below, the cursor is over minute 19, second 0 of the Echo.
- Interprets the color. In the example below, the cursor is over an orange portion of the heat map so the tooltip indicates that the segment is "warm".

USAGE HEAT MAP — Minimal ■ Low ■ Moderate ■ High

0:00   19:0 – This segment is warm   00:49:59
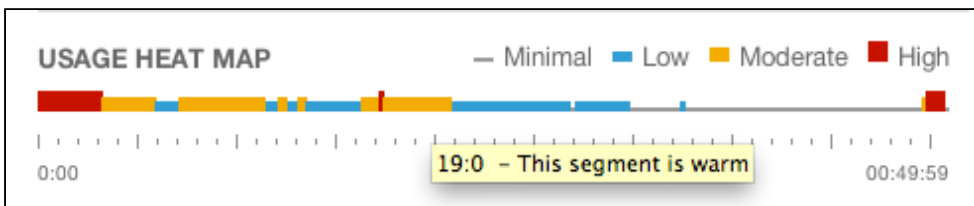
The EchoCenter determines the "heat quotient" of a segment by analyzing:

- The number of views received by a segment
- The number and intensity of discussions generated by a segment
- The number of notes generated by a segment

Discussions - What Did Students Learn?

In this section:

- [Overview](#)
- [Recent Activity Pane](#)
- [Discussions for a Specific Echo](#)

Overview

You, your Teaching Assistant, or any student can start a discussion while viewing an Echo by clicking the Discussions button (shown below).
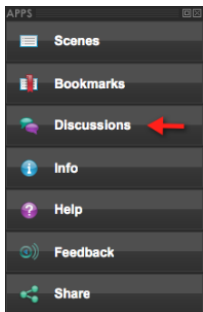
These discussions are listed on the EchoCenter page, where you can view them in summary and respond to a particular comment. You can see:

- A list of all discussions in the Recent Activity pane
- Discussions specific to a particular Echo

Discussions offer an informal way for you to help students understand a topic or for students to help each other.

Recent Activity Pane

The Recent Activity pane (shown below) shows the most recent discussions in the course. **These could have occurred in any Echo**, not just the most recently recorded Echo.
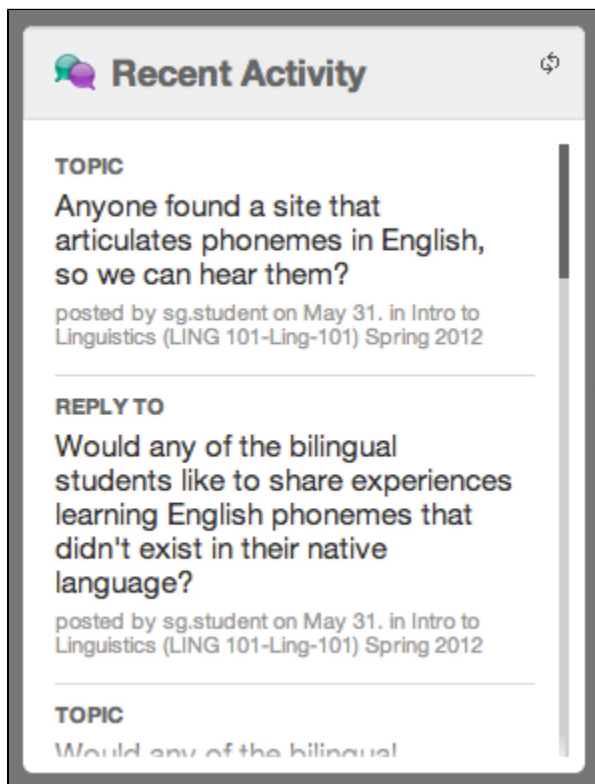
A new discussion topic is tagged as **TOPIC**. A reply to an existing topic is tagged **REPLY TO**. Clicking on either of these or the course name opens the Echo to the scene that elicited the discussion.

The date and time shown beneath each item is the date and time it was entered. This can be any time after the Echo was posted to the EchoCenter page.

The most recent discussions are posted at the top of the pane:

- Click the Refresh icon in the upper-right corner to update the pane
- Use the slider to see earlier discussion topics

You can monitor these discussions or ask your Teaching Assistant to do so. You might want to:

- Respond to discussions or start a new discussion. To do this:
    1. Click on an item (either a **TOPIC** or **REPLY TO**) or click on the course name to open the EchoPlayer.
    2. Click on the Discussions button in the EchoPlayer.
- Make a Personal Capture recording that amplifies a discussion topic.

Discussions for a Specific Echo

You can see the discussions for a specific Echo:

1. Select the Echo with the discussions you want to see.
2. Click on the Discussions tab.
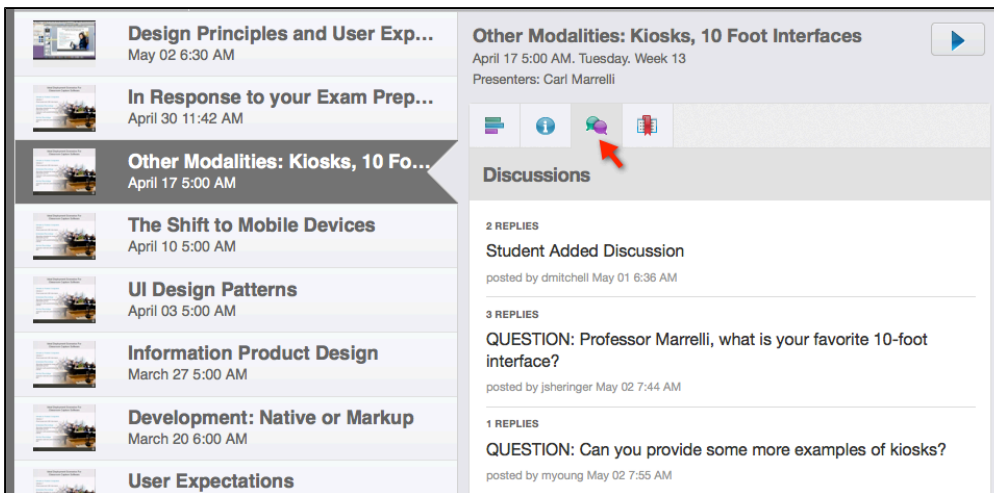
3. Click on any discussion to open the Echo at that scene.
4. In the EchoPlayer, click on the Discussions button to add a comment.

Student Usage Reports - Are Students Engaged?

In this section:

- Overview on Views and EchoCenter Analytics
- Content Engagement
- The Student Aggregate Report
- The Student Specific Report

Overview on Views and EchoCenter Analytics

For an overview of how EchoCenter Analytics are calculated and displayed, please visit: Overview of Views and EchoCenter Analytics

Content Engagement

EchoCenter content engagement analytics allow you to improve your teaching in these ways:

- You can identify students who may be falling behind
- You can identify students who are working diligently

You can also use engagement analytics as part of a broader analysis.

- You can **export all student data to a .csv file that can be opened and manipulated in Excel or another spreadsheet program.** This allows for integrated analysis: You can combine the engagement analytics with data from other academic systems, such as learning management systems, homework applications or e-portfolios. Doing so provides a more complete picture of student engagement.
- You can include **lecture review in course assessment**. In a distance learning course, for example, you might use participation in LMS-based discussions as an input when calculating a student's attendance score. You could also include lecture review as another input. Students can raise their attendance score by diligently reviewing every Echo.

Two different EchoCenter reports give you these insights:

- The student aggregate report
- The student detail report

The Student Aggregate Report

Overview

As an Instructor, you try to assess each student's learning experience:

- Did he attend every class meeting?
- Did she seem to be paying attention in class?
- Did she ask questions that either demonstrated understanding or sought clarification?

Engagement analytics give you data on what students are doing outside of the class.

The student aggregate report shows engagement data for each student in a section. For each student you see these parameters.

- **Name (ID).** This parameter shows the student name in first name, last name, format. It may also show additional IDs.
- **Unique Views**. This parameter is the number of different Echoes the student has viewed. For example, if you have presented 12 lectures (and every lecture has been made into an Echo), then a diligent student would show 12 in this field, indicating that he has viewed each lecture once. In general, a higher number indicates higher engagement.
- **Cumulative Views**. This parameter is the total number of Echoes the student has viewed. Continuing with the example given above, if your diligent student viewed each Echo twice, this field would show 24. In general, a higher number indicates higher engagement.
- **Completion**. This parameter is the amount of the Echo that was viewed. A student who watches every scene of an Echo generates a completion rate of 100% for that Echo. This parameter is the average completion rate for all Echoes viewed. In general, a higher number indicates higher engagement.
- **Bookmarks**. This parameter is the number of bookmarks posted for all Echoes. In general, a higher number indicates higher engagement.
- **Discussions**. This parameter is the number of discussion topics posted for all Echoes. In general, a higher number indicates higher engagement.
- **Downloads**. This parameter shows if the student downloaded Echoes (to an iPod, iPad, or laptop), as opposed to watching Echoes streamed in the EchoPlayer. If a student has downloaded an Echo, his interactions are **not** collected. This means that many parameters may be unusually low, seeming to indicate that the student is disengaged. This may not be so. See Students Who Download Echoes Have Skewed Data for details.
- **Live Views**. This parameter is the number of times a student has attended a live webcast as opposed to attended the class in the classroom.

- **Last Viewed**. This parameter, in conjunction with the Date Viewed parameter, can help you detect either a diligent or disengaged student. A diligent, engaged student views each Echo soon after it is posted. A less engaged student shows a bunching pattern, viewing many Echoes for the first time just before an exam.
- **Date Viewed**. This parameter is the date a student last viewed any Echo. In conjunction with the Last Viewed parameter, it can help you detect either a diligent or disengaged student.

ⓘ **Students Who Download Echoes or Use Mobile Devices Have Skewed Data**

Think Before You Conclude. If a student shows low numbers for the first six parameters listed (Unique Views, Cumulative Views, Completion, Last Viewed, and Date Viewed), you might conclude that she is not engaged. Before drawing that conclusion, look at the Downloads parameter. A student may have downloaded many Echoes and be diligently viewing them, but these activities will **not** be reflected in the first six parameters.

Is the Student Using a Mobile Device? If usage information is not appearing at all for a student, or minimal usage information appears, find out how the student is consuming the Echoes. The EchoSystem collaboration service is not able to collect information from mobile players at this time, so those views are not being tracked. This is slated to be addressed in a future release.

Why is the Data Skewed Like That? When a student views an Echo via the full EchoPlayer (via desktop or laptop), the EchoSystem Server (ESS) can collect the parameters listed above. When a student downloads an Echo, or views an Echo from a mobile device (phone or tablet), communication with the ESS is hindered and no such data can be collected. Because it is not collected, the parameters for the student are low.

Therefore. Consider the Downloads parameter and mobile viewing possibility before drawing conclusions about a student's engagement.

View the Student Aggregate Report

1. Navigate to the EchoCenter page for the section.

2. Click the Reports tab.
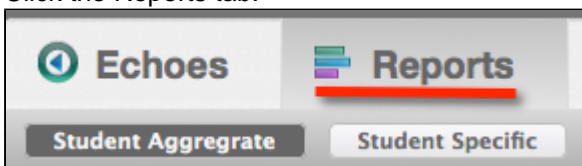
3. Review the student aggregate report, which is shown by default.

Explore the Report Features

Hide or Show Additional IDs
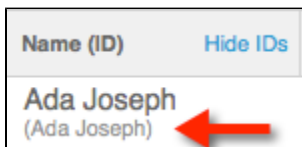
The report always shows students names as first name, last name ("Carlos Garcia"). Additional IDs, shown in parentheses under the EchoCenter ID, are those used in other systems, such as a learning management system (BlackBoard, Moodle) or a grading report system. These systems may use different name formats for the same student. ("cgarcia" instead of "Carlos Garcia"). Showing the additional IDs allows you to integrate data from engagement analytics with data from other systems.

If you do not want to reconcile data with other systems, we recommend hiding the IDs. This makes the report easier to read.
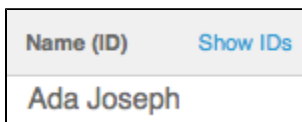
Sort Columns to See Maximums and Minimums

You can sort most columns by clicking on the column heading.

A few columns are not sortable, but you can export a report and manipulate the data in Excel or another spreadsheet program. See Export to a Spreadsheet.

Navigate through the Report

If the report contains more names that can be displayed on a single page, it is divided into pages. Use the page icons at the bottom of each page (or the Forward and Backward arrow buttons) to navigate through the report.

Adjust the Number of Names Per Page

Click the control at the bottom of the report to adjust the number of names shown on the page. The more names you show on each page, the fewer pages in the report.
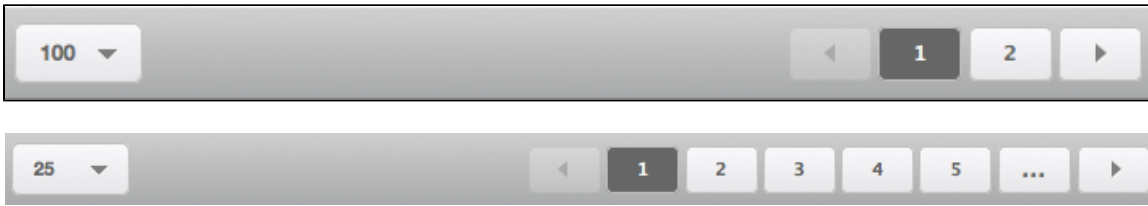
Export to a Spreadsheet

Exporting data to a spreadsheet allows for integrated analysis, as described in the Overview.

Both the student aggregate report and the student specific report are exported.

- The student aggregate report (student-usage-aggregate.csv) shows the same student aggregate data as you see on the EchoCenter page.
- The student specific report (student-usage-specific.csv) shows specific data for **every** student. This is different from what you see on the EchoCenter page. On the EchoCenter page, the student specific report shows detailed data for a **single** student.

Follow these steps. This procedure shows the steps for a Macintosh. The procedure is similar for Windows.

1. Click the Export button.
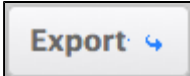
2. The reports are prepared, compressed into a zip file, and exported. Notice that the Export button changes, as shown below, to indicate the export is in progress.
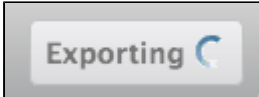
3. When the reports are ready, you see the open/save dialog box, as shown below.
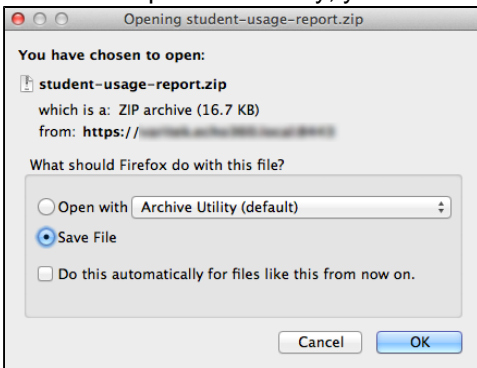
4. Either open the report or save it. In this example, we save the report to the desktop, as shown below. Notice that the report is a zip file.
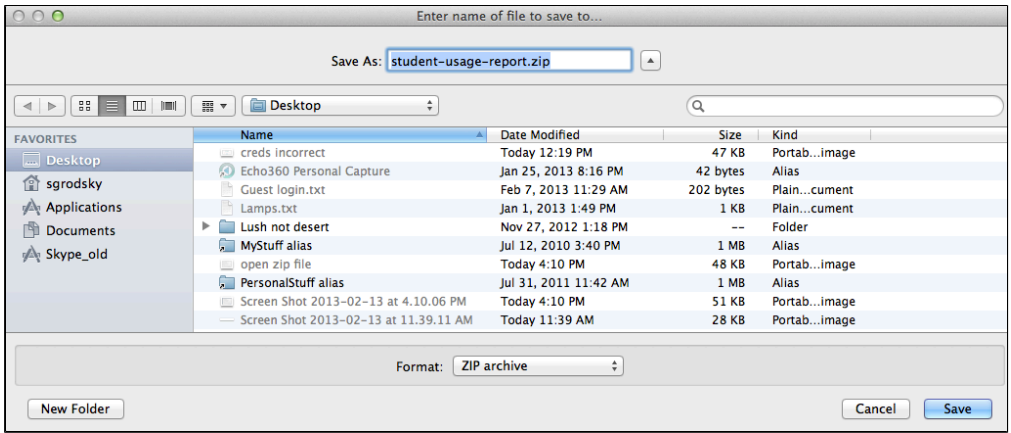
5. Expand the zip file. You see both the zip file and the individual files in a separate folder, as shown below.
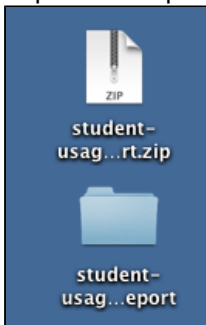
6. Open the folder, then open either report and manipulate the data as you wish. In this example we opened the student aggregate report and sorted the Average Viewing Percentage parameter.
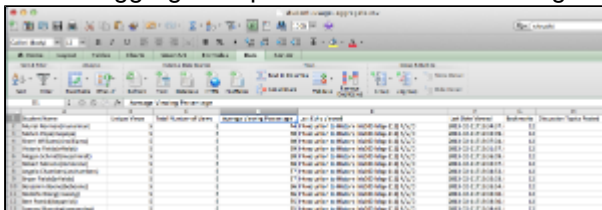
Navigate to the Student Specific Report

1. Click on a student name.

2. The student specific report for that student opens.

The Student Specific Report

Overview

The student specific report shows student interaction with a particular Echo. For each student and each Echo you see these analytics:

- **Echo Date (Title)**. This parameter is the title of the Echo and the date it was recorded.
- **Completion**. This parameter is the amount of the Echo that was viewed. A student who watches every scene

of an Echo generates a completion rate of 100% for that Echo. In general, a higher number indicates higher engagement.

- **Total Minutes**. This parameter is the total minutes viewed. In general, a higher number indicates higher engagement.
- **Discussions**. This parameter is the number of discussion topics posted for the Echo. In general, a higher number indicates higher engagement.
- **Bookmarks**. This parameter is the number of bookmarks posted for the Echo. In general, a higher number indicates higher engagement.
- **Last Opened**. This parameter is the date the Echo was last viewed. In general, a recent view date indicates higher engagement.
- **Participated Live**. This parameter shows if the student attended a live webcast as opposed to attending the class in the classroom.
  Downloads. This parameter shows if the student downloaded the Echo (to an iPod, iPad, or laptop), as opposed to watching the Echo as it is streamed in the EchoPlayer. If a student has downloaded an Echo, his interactions are **not** collected. This also applies if the student is viewing echoes on a mobile device. This means that many parameters may be unusually low, seeming to indicate that the student is disengaged. This may not be so. See Students Who Download Echoes Have Skewed Data for details.

View the Student Specific Report

1. Navigate to the student specific report by using one of the methods below:
   - Navigate from EchoCenter page:
     a. Click on the Reports tab.
     b. Click on the Student Specific Report button.
     c. Enter the name of the student.

   - From the student aggregate report, click the name of the student.
2. Review the student specific report. You can sort columns, export the data, and navigate through this report as you can with the student aggregate report. See Explore the Report Features.


Improve Learning - Add Descriptions for Each Echo

In this section:

- [Why Add Descriptions?](#)
- [Echo Descriptions Are Different From Section Descriptions](#)
- [Procedure - Edit the Description and/or Title for a Specific Echo](#)

Why Add Descriptions?

You can help students get the most out of each Echo by adding a short description for each one. Descriptions appear in the Information tab of the student's EchoCenter page.
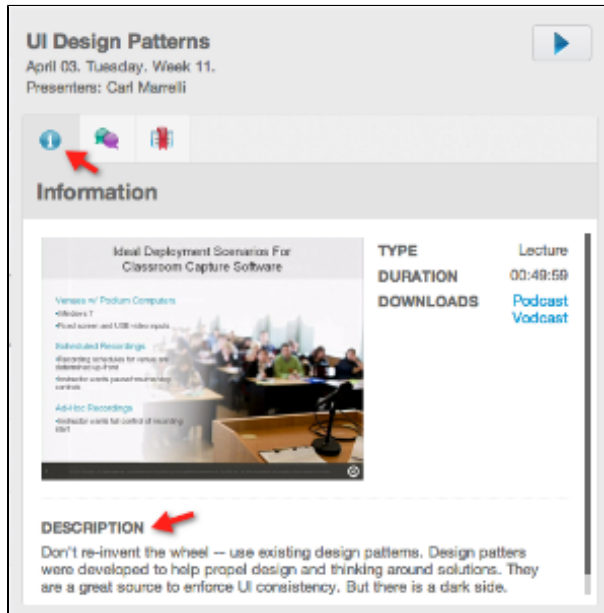
Adding a description helps you and your students navigate to the correct Echo. Say, for example, that a student wants to review your discussion on phonemes. Launching and listening to every Echo in the course would be a daunting task. If you add a description, the student can quickly find the Echo titled "Phonology". This is likely to be the correct Echo.

Echo Descriptions Are Different From Section Descriptions

This procedure shows how to add a description **for a specific Echo**. Your System Administrator may have added a description for your particular **section** ("This introductory course covers..."). If you do not add a custom description for the Echo, the section description appears for the Echo.

You can also change the title of an Echo. The title, like the description, comes from the particular section. If you do change an Echo's title, be sure it still identifies the section in a way that students will recognize.

> ☑ **Best Practice: Add a Description for Every Echo**
>
> If you add a description for one Echo, add a description for every Echo. If you do not, students see a specific description for some Echoes ("Phonology") but the section description ("This introductory course covers...") for others.
>
> This task can be delegated to a Teaching Assistant.

### Procedure - Edit the Description and/or Title for a Specific Echo

1. Navigate to the EchoCenter page for the section.
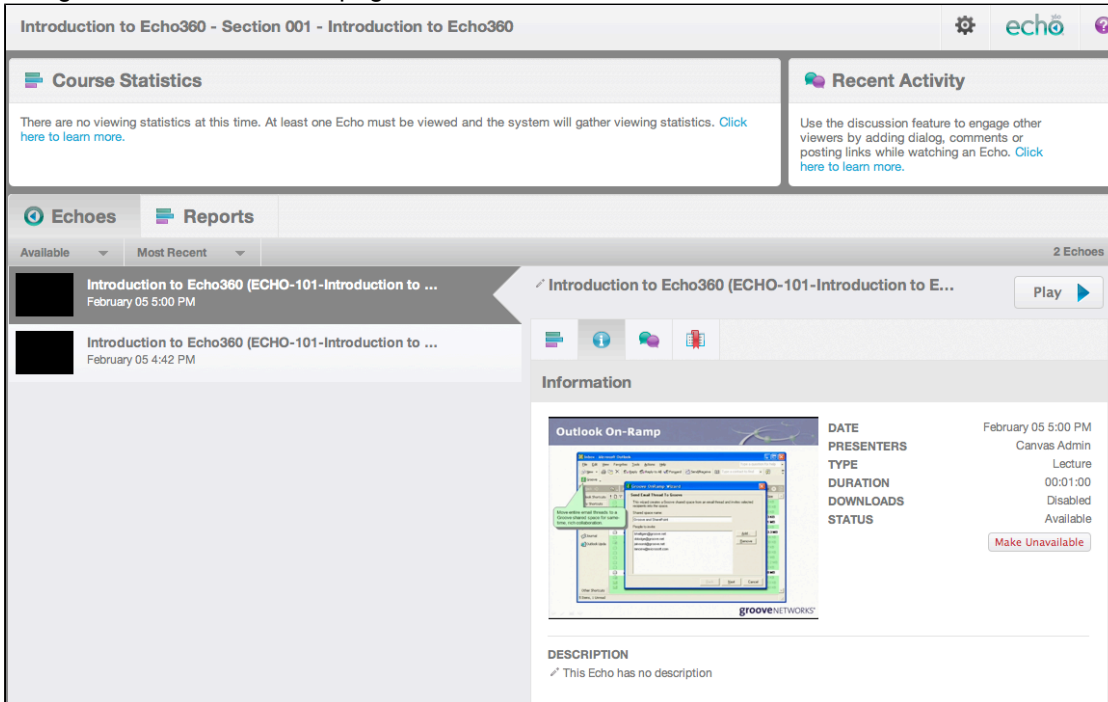
2. Find the Echo you want to customize with a description or new title. All Echoes for the section have the same title, the title of the section, unless they have been manually changed.
3. Click the **Information** tab to show the Echo's information. Notice the small "pencil" icons located to the left of the title and description, as indicated in the figure below.
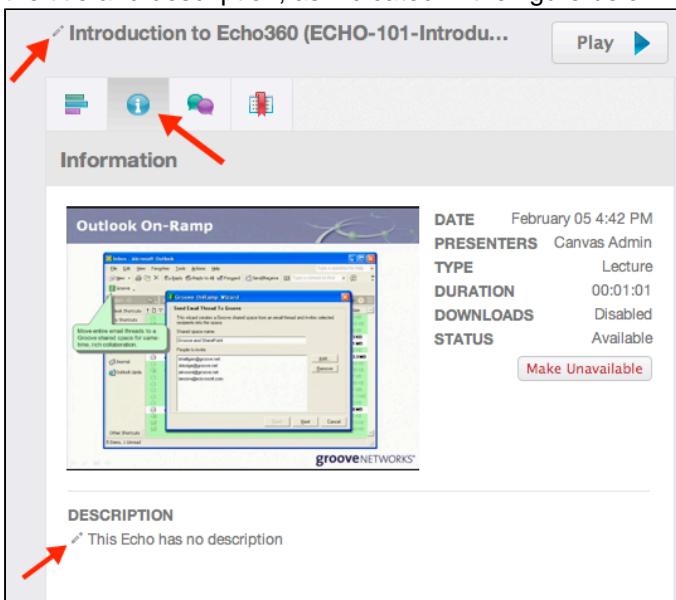
4. To edit the **Description**, click the pencil icon next to the description.
5. Change the text in the Description text box, then click the **check mark** below the text box, as shown in the below figure, to save your changes. To cancel your changes, click the **X**.
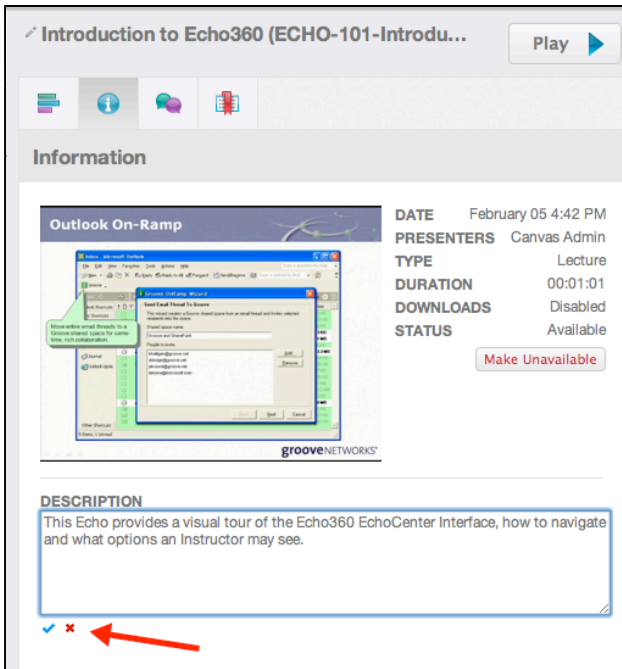
6. To edit the **Title** of the Echo, click the pencil icon next to the title.
7. Change the text in the Title text box, then click the **check mark** below the text box, as shown in the below figure, to save your changes. To cancel your changes, click the **X**.
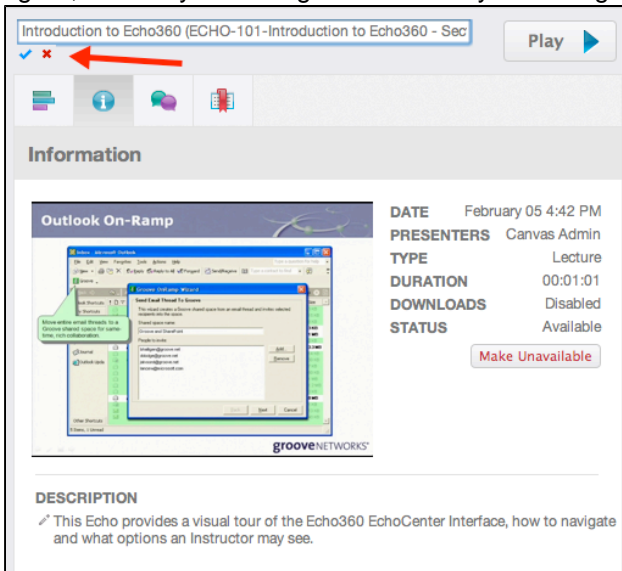
The changes you make take place in real-time. If you make changes to the title or description, students will see those changes immediately.

Other Items on the EchoCenter Page

Overview

Other items included on the EchoCenter page are described on this page.

Live Webcast Button

If a live webcast is scheduled, you will, initially, see a banner announcing it. About 15 minutes before the scheduled start time of the live webcast, and during the webcast itself, you will see a button (as shown in the figure below) that allows you to join the webcast.

If you are using Lecture Tools and want to prepare items for the Live webcast prior to it starting, see Prepare Lecture Tools Course Materials below, as well as Using Lecture Tools with EchoCenter.

Upcoming Recording Banner

The next lecture scheduled for capture is listed at the top of the EchoCenter page, as shown in the figure below.

Prepare Lecture Tools Course Materials

If your organization is using Lecture Tools in combination with EchoCenter, you may see "Course Tools" buttons that provide access to the Lecture Tools system, and allow you to prepare and publish materials for your courses.

The figure below shows the top banners of the Instructor's view of an EchoCenter, with the Lecture Tools access buttons described below the figure. Both buttons open Lecture Tools and link to the corresponding course in Lecture Tools.
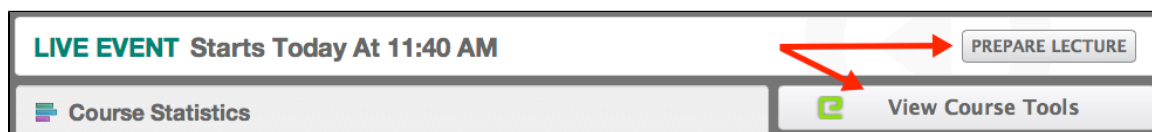
- **Prepare Lecture** - The Prepare Lecture button appears only for Live Events, allowing you to prepare materials such as polls or in-class quizzes and questions prior to the beginning of the event. This access is available anytime before the next Live event begins (and immediately following the end of any previous live event).
- **View Course Tools** - The View Course Tools button is available any time for all courses whether scheduled

as a Live event or not. It allows you to prepare materials such as polls or in-class quizzes and questions prior to the beginning of a class.

You will also see a Lecture Tools button for preparing a lecture to the left of the Play button in the EchoCenter, as shown in the below figure. This button also opens the corresponding Lecture Tools course and allows you to prepare materials for any of the lectures for the course.
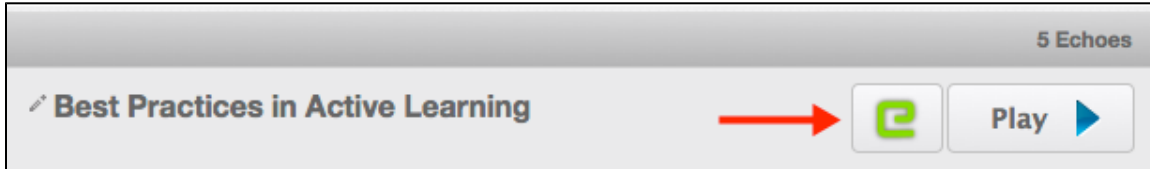

Information Tab

Click on the Information tab to:

1. See identifying details (date, type, duration) about the selected Echo.
2. Get access to Lecture Tools materials if integrated with your system. This is the green E button shown in the below figure, to the left of the Play button. See Using Lecture Tools with EchoCenter for more information.
3. Download Podcast, Vodcast, browser-based offline EchoPlayer versions of the Echo. The below figure shows an Audio File available for download. If the section is configured to not provide downloads, this field shows "Disabled".
4. See a description of the Echo if you entered one (see Improve Learning - Add Descriptions for Each Echo).
5. Copy the "Embed Code" for the echo. You can copy and paste this code into an LMS page for the section to embed the Echo there, or in a 3rd party website such as a staff member's course page.
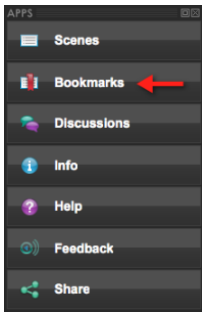
Follow these steps:

1. Select the Echo with the information you want to see.
2. Click on the Information tab, circled in the below figure.
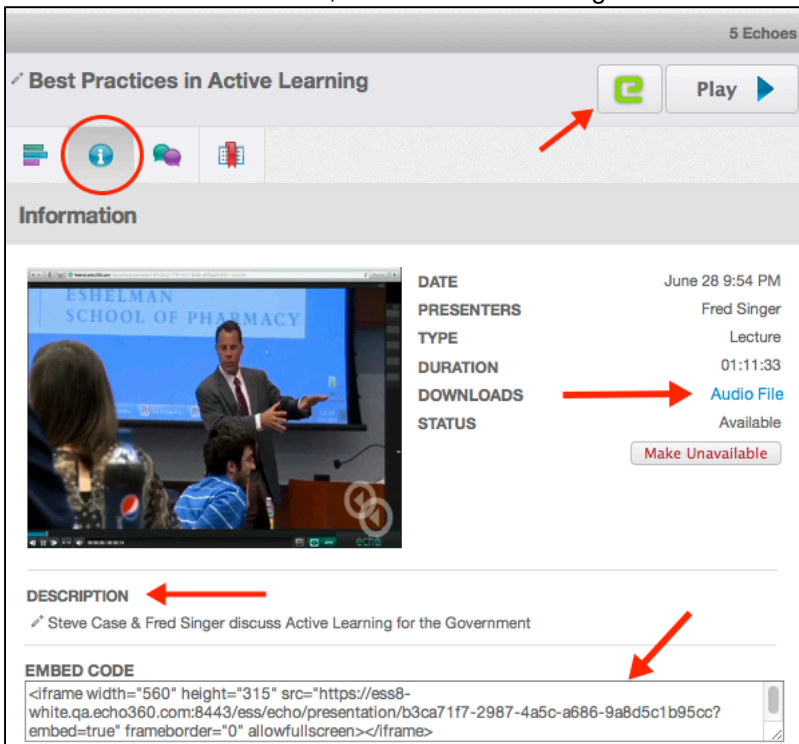
Bookmarks Tab

You or a student can add a bookmark to an Echo by clicking the Bookmarks button (shown below) while viewing the Echo in the EchoPlayer.


Bookmarks are important for students because they:

- **Tag important parts** of the Echo, allowing the student to quickly navigate to a certain point
- Can serve as brief **course notes**, offering an overview of what was covered in a particular lecture

Users only see their own bookmarks. You see the bookmarks you added. Each student sees the bookmarks he/she added.

Follow these steps:

1. Select the Echo with the bookmarks you want to see.
2. Click on the Bookmarks tab.
3. Notice that the date below the bookmark is the date the bookmark was added to the Echo. It is **not** the date the Echo was captured.
4. Click on the bookmark to open the Echo to that point.
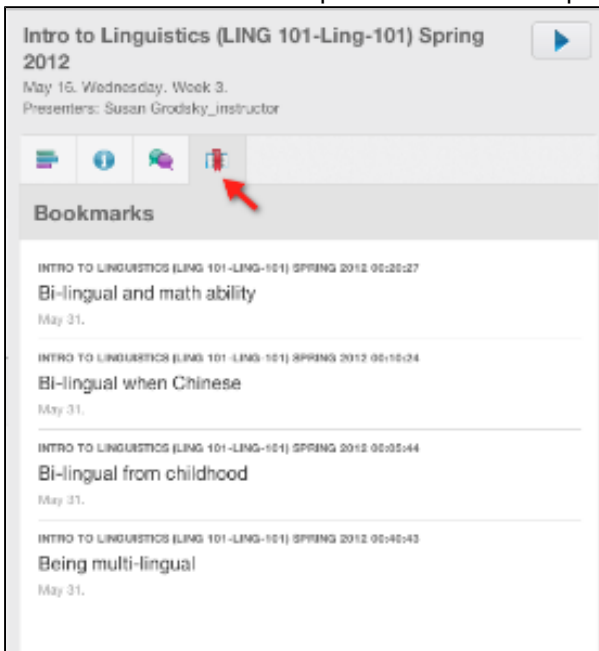
Available/Other Control

As the school year progresses, the list of Echoes can become long and unwieldy. The Available/Other radio buttons help you organize the list of Echoes.

Click the **Available** button to see a list of Echoes that have been processed.

Click the **Other** button to see a list of:

- Echoes still being processed.
- Scheduled recordings.
- Echoes that are marked Not Available. See Manage Echoes for Academic Staff for instructions on marking an Echo as Not Available.
- Class meetings that were not captured as Echoes.

An example of the Other list is shown below.

The Other list provides the following options and information:

1. Available/Other drop-down list. Allows for toggling between the Available Echoes and Other Echoes
2. Hide Unavailable/Show Unavailable drop-down list. This control is especially convenient for students, who can shorten the list by hiding unavailable Echoes. Echoes can be unavailable for a variety of reasons:
   - You, the Instructor, may have marked an Echo as unavailable
   - A class meeting may not have been captured because of a power outage or other malfunction
3. The number of Echoes in the list.
4. The status of any Echoes listed. This may identify that the Echo is being processed, or that the Class meeting was not captured. Most class meetings are captured and become available as Echoes, so it is helpful to see this case explicitly noted.
5. The Presenters(s) and Room associated with any Echoes listed.

Preferences Button

The Preferences dialog box allows you to specify a variety of options that ensure you are using the EchoCenter to the fullest extent. In general, you can leave these options at the default values. However, you might want to change some options to customize the EchoCenter for your particular situation.

Follow these steps:

1. Click the **Preferences** button.

2. You will see one of the Preferences dialog boxes shown below. The dialog box you see depends on the security configured for your section.
   - If the section requires a login, you see the longer dialog box, including presenter and export options.
   - If the section does not require a login ("anonymous access") you see the shorter dialog box.
   - These instructions assume you see the longer dialog box. If you do not see it, consult with your System Administrator. Credentialed access (access that requires a login) allows you to use the Presenter tool and report export.
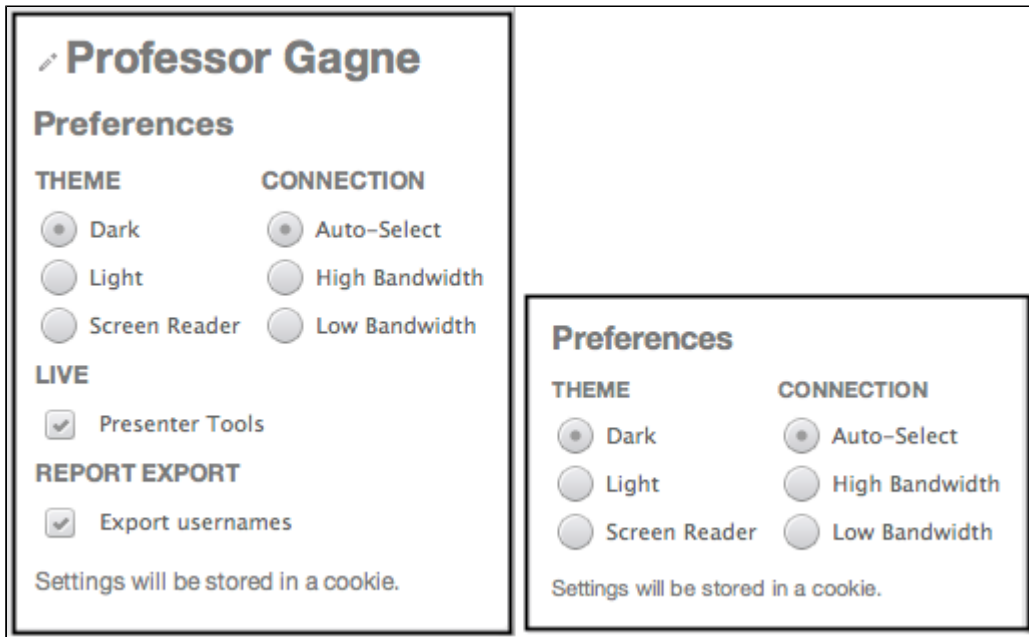
3. The display name is the name students see when you are chatting and asking questions in the EchoPlayer.

   To change your display name, follow these steps:

   a. Click anywhere on the display name ("Professor Gagne" in this example).

   b. The display name becomes an editable field, as shown in the below figure.

   c. Edit the name.

   d. Click the check mark to save the edited name. Click the X to cancel any changes made in the field.

4. Select your preferred **Theme**.

   - The Dark and Light themes control the background of the Echo

   - The Screen Reader theme is optimized for the visually-impaired.

5. Select your preferred connection speed. The connection speed that can be supported depends on the quality

of your network. We recommend choosing Auto-Select (this is the default).

> ℹ️ **Theme and Connection affect the EchoPlayer not the EchoCenter**
>
> Selecting Theme and Connection options affect the appearance and performance of the EchoPlayer, and have no affect on the EchoCenter.

6. Check or uncheck the **Presenter Tools** check box. Checking the box gives you access to tools that are useful when doing a live webcast. See Live Webcasting for Academic Staff.

7. Check or uncheck the **Export usernames** check box. We recommend that you leave this box checked (this is the default).
   - This option may be useful if you will export engagement analytics to a spreadsheet (see Student Usage Reports - Are Students Engaged?).
   - If you do so, the student name on the report will be the name EchoCenter uses. This is the student's first name and last name ("Carlos Garcia").
   - However, you may want to compare the engagement analytics reports with information from other systems, such as a learning management system (BlackBoard, Moodle) or a grading report system. These systems may use different name formats for the same student. ("cgarcia" instead of "Carlos Garcia").
   - When this box is checked, the exported engagement analytics report shows both name formats, allowing you to reconcile data from engagement analytics with data from other systems.
8. Move your cursor away from the dialog box. The box disappears. Your changes have been saved.

Using Lecture Tools with EchoCenter

In this section:

- Overview
- Process
- Linking to Lecture Tools
- Adding Lecture Tools Materials to Existing Echoes

Overview

Echo360 has been integrated with Lecture Tools to allow instructors to seamlessly provide in-class quizzes, questions, and polls, to provide a more interactive experience, even with remote students.

There are two primary scenarios for which the Lecture Tools integration was designed:

- **Live Webcasts:** Allows you to integrate the questions to students during class in real-time and within the context of the lecture or presentation. Lecture Tools allows you (or a Teaching Assistant) to review responses in real-time as well, letting you incorporate those responses into your presentation.
- **With Personal Capture as a pre-class exercise:** Allows you to post a Personal Capture recording, then add polls or questions for students to respond to prior to class. Then you can use the classroom time to discuss the students' responses.

This page provides information on accessing Lecture Tools through the EchoCenter. If you need assistance or instructions for using Lecture Tools itself, please refer to the Lecture Tools documentation or contact your institution's help desk.

> ℹ️ **Access Lecture Tools and EchoPlayer Through EchoCenter**
>
> The integration between EchoCenter and Lecture Tools is currently a "one-way" integration. This means you can only link the Lecture Tools course materials to the EchoCenter course lecture by accessing them through EchoCenter. While you can prepare materials directly in Lecture Tools, in order to provide them to the class, you AND your students MUST access the EchoPlayer lecture through the EchoCenter course page. Direct links to the lecture itself (the EchoPlayer or Live webcast) will NOT provide links to the polling materials generated through Lecture Tools.

Process

The basic process for using Lecture Tools with a course in EchoCenter is as follows:

1. Open the EchoCenter course page.
2. Click a Lecture Tools link. There are several options, depending on whether the course is streamed as a Live event or distributed only as a Personal Capture recording or Echo.
3. Create a password in Lecture Tools. You will only have to do this once.
4. Create the course in Lecture Tools. You will only have to do this once for each course. Alternately, if the course already exists in Lecture Tools, you can select it from a list.
5. Create the lecture in Lecture Tools. You will do this for each lecture for which you want to provide Lecture Tools materials and questions.
6. Create the materials in Lecture Tools. The EchoCenter integration supports everything *except* Image Quiz.
7. Publish the Lecture Tools course materials, hiding or unhiding items as appropriate.

> ⚠️ **Lecture Tools Requires User Login for Both Students and Instructors**
>
> Lecture Tools can only be used for courses that are configured with user authentication required. This is because Lecture Tools must have login information for both instructors and students in order to deliver the proper course materials as well as to record quiz or polling question responses from students. If you are not seeing the Lecture Tools access buttons described on this page, or your students are not seeing the Polling link to view the configured Lecture Tools materials, contact your System Administrator and be sure that authentication has been configured for the course.

Linking to Lecture Tools

When you enter the course EchoCenter page, you will see one or both of the Lecture Tools buttons identified in the below figure.

If the course is configured as Live event, you will see a **Prepare Lecture** button in the Live Event banner. Otherwise, you can use the **View Course Tools** button at any time to link this EchoCenter course to a course in Lecture Tools.

You will also see a Lecture Tools button for preparing a lecture to the left of the Play button in the EchoCenter, as shown in the below figure. This button also opens the corresponding Lecture Tools course and allows you to prepare materials for any of the lectures for the course.
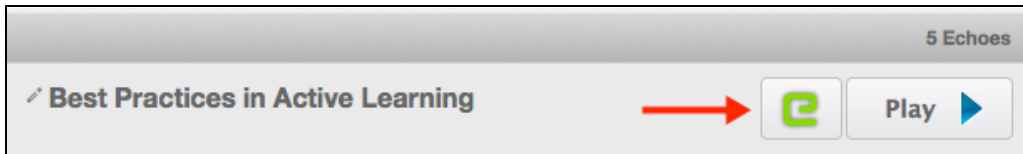
Once you click a Lecture Tools button, a new browser tab or window opens (depending on your browser's settings) showing Lecture Tools. If this is your first time accessing Lecture Tools, you will be asked to create a password, as shown in the below figure. You will only have to do this one time.

After creating a password, you must either create or link to a Lecture Tools course, as shown in the below figure. This is the course that will be linked to your EchoSystem course.

If you have not already configured a course in Lecture Tools, you must create one. The figure below shows the information requested by Lecture Tools for the course you are creating. Enter the information that corresponds to the EchoCenter course to which you want to link. You will only have to do this once for each course.

Once the course is created, you are then asked to create a specific lecture for that course, as shown in the below figure. You should use a Lecture Title that easily identifies this lecture and ties it to the specific Course lecture to which it will be linked, such as the subject of the particular presentation. You will have to do this for each lecture for which you want to provide Lecture Tools materials. However you can import the slides from a prior lecture if necessary.


Now you can create the lecture materials. Once published, this lecture's materials will be linked through the Polling button on the EchoPlayer, shown below, allowing students to participate as you present the questions during your lecture or presentation. Remember (and remind them) that students MUST ACCESS the lecture or Personal Capture recording through the course EchoCenter page and NOT via a direct link to see your polling materials and participate in class.
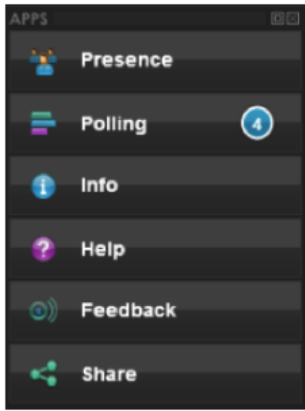
When students click the Polling button, the Lecture Tools presentation materials are listed, along with selections for responses. An example is shown below. Keep in mind that you can hide or unhide lecture materials throughout the presentation, or have a Teaching Assistant do this for you. That allows each poll or quiz question to be shown individually as appropriate.
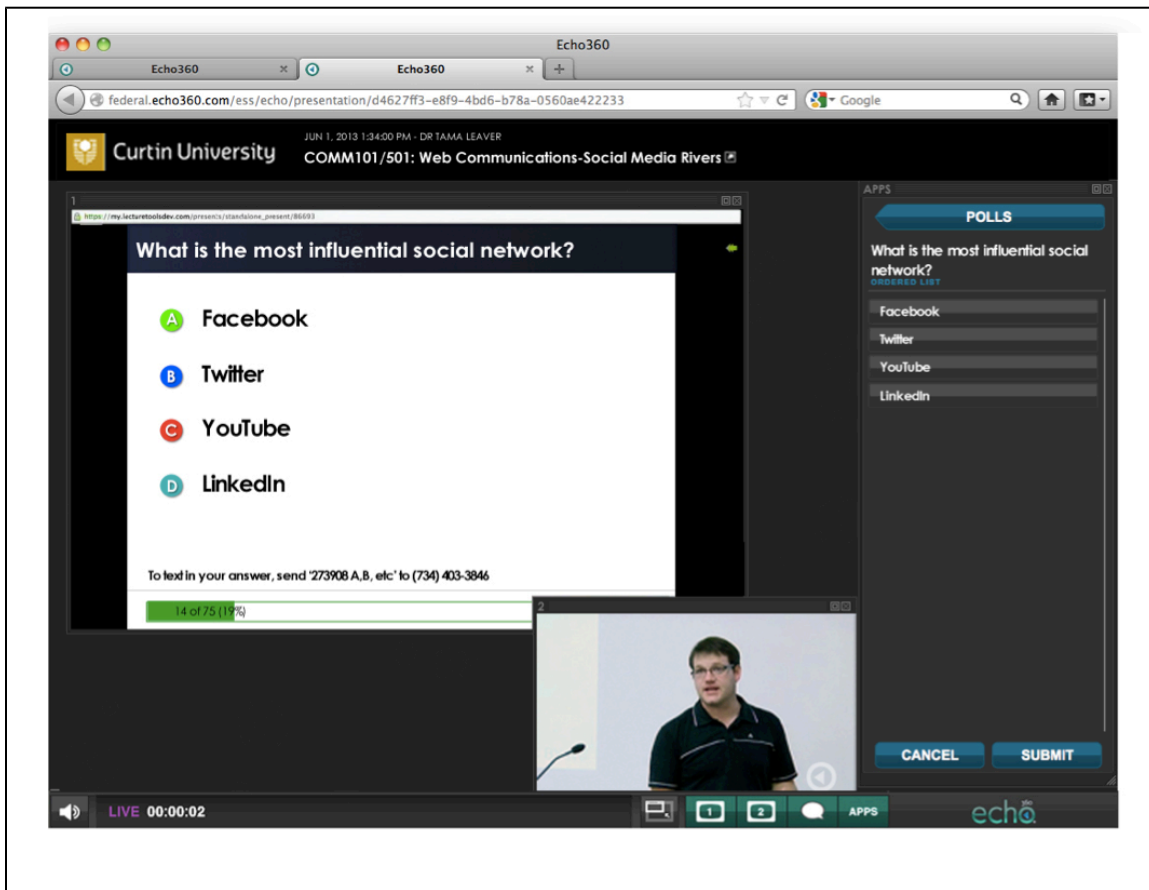
Responses are recorded in Lecture Tools, allowing you (or your Teaching Assistant) to review the responses in real-time (for Live presentations) or later as appropriate.

If you need assistance in using Lecture Tools, or you are not seeing the access buttons or other items described here, please refer to the Lecture Tools documentation (click Help in Lecture Tools) or contact your institution's help desk for assistance.

Adding Lecture Tools Materials to Existing Echoes

As noted in the [Overview](#) above, the expectation is that Lecture Tools materials will be used primarily for Live event presentations, or for pre-class exercises in association with Personal Capture.

The basic difference in use between the two is that during a Live presentation, you can present each question or poll in real-time, in coordination with the lecture as it is given. When adding Lecture Tools materials with a Personal Capture recording (or to a classroom Echo) remember that students can see ALL of the published questions at any time during the recording. The poll cannot be coordinated with any particular time on the recording.

Use the following steps to add Lecture Tools materials to an existing Echo (either a classroom or Personal Capture recording):

1. Access the Course page in EchoCenter.
2. Find the Echo you want to add materials to and (optionally) [make the recording Unavailable](#).
3. Click the green "e" button to the left of Play (as shown above) to access Lecture Tools.
4. Follow the instructions on this page as needed to create a password, course, and lecture in Lecture Tools.
5. Create the Lecture Tools materials and Publish them.
6. Return to the EchoCenter page.
7. [Make the Echo Available](#) again (if you made it Unavailable).

Students viewing the recording should now see a Polling button that contains the materials you created in Lecture Tools for this lecture.

Embeddable EchoPlayer for Academic Staff

In this section:

- [Embedding the EchoPlayer](#)
- [Features of the Embedded EchoPlayer](#)
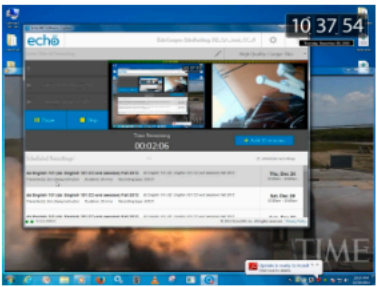
Embedding the EchoPlayer

If enabled by the system administrator for a section, EchoSystem provides an embeddable EchoPlayer link, called **Embed Code**, allowing Academic Staff to embed the EchoPlayer for a specific Echo into an LMS, or instructor's webpage, or other external location.

If you do *not* see the Embed Code as described below, contact your system administrator and ask them to enable **Sharing** for the section. This is configured in the [EchoPlayer configuration for each section](#).

The **Embed Code** is available as follows:

- On the **Info** tab for the Echo in the EchoCenter, as shown below.

- By clicking the **Share** button in the EchoPlayer, as shown below.

The embeddable EchoPlayer link functions exactly as a YouTube embeddable link, only instead of the YouTube URL for a video, it contains the ESS URL for the specific Echo. Copying and pasting the Embed Code into an external location displays the selected Echo within the EchoPlayer on the webpage, providing the EchoPlayer experience for the user.

If user authentication is required, the embedded EchoPlayer frame will show a login screen for users. If users are already authenticated through an LMS, they should not have to re-enter their credentials.

> **Limitations for Embedded EchoPlayer Playback**
>
> An embedded EchoPlayer will not play on a mobile device, but mobile users will receive a link to launch the full EchoPlayer.
>
> If users are required to acknowledge the copyright for a section's Echoes, the Echoes cannot be played through an embedded EchoPlayer. Copyright acknowledgement is configured in the Branding configuration for each section. Contact your System Administrator if you need this setting changed to allow embedded EchoPlayers for a section.

Features of the Embedded EchoPlayer

The embedded EchoPlayer looks and functions very similarly to the full EchoPlayer, but without having to launch the EchoPlayer in a its own browser window or tab.

The below figure shows an embedded EchoPlayer in a web page, along with identifying some of the capabilities. These items are described in more detail below the figure.
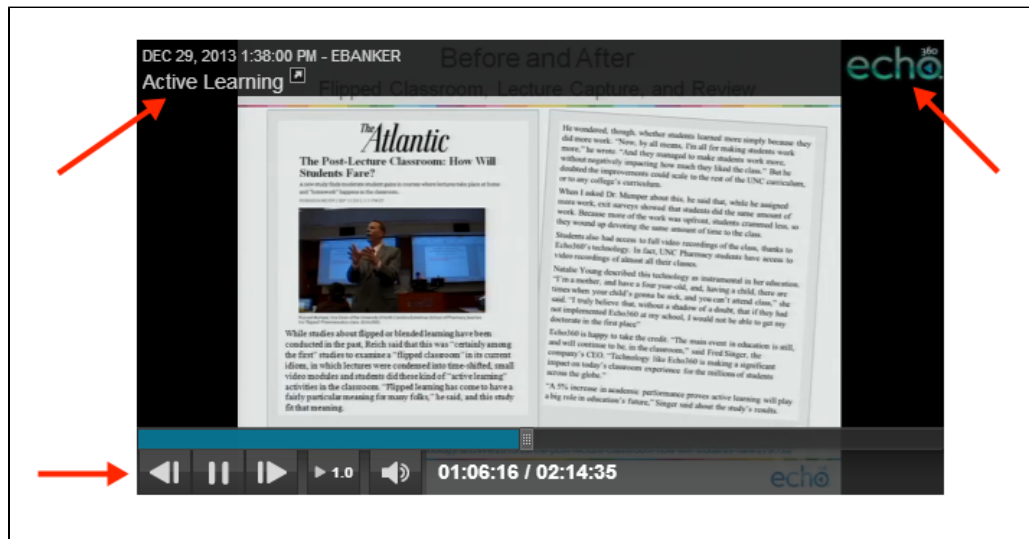
The arrows in the above figure identify the following items in the embedded EchoPlayer:

- Clicking the section title or launch arrow in the header opens the EchoCenter for the section to which the Echo belongs.
- Clicking the Echo logo on the right side of the header will launch the full EchoPlayer in a new tab (just like launching the EchoPlayer from EchoCenter, with full functionality).
- The standard playback controls appear at the bottom of the embedded EchoPlayer, allowing for play/pause, skip to next scene, skip to previous scene, variable speed playback (VSP), audio level, and "seek" with the playhead.

The embedded EchoPlayer also allows for the use of the following keyboard shortcuts:

- P: Play/Pause (toggle)
- F: View in Fullscreen
- N: Skip to Next Scene
- B: Go back to Previous Scene
- U: Volume Up
- D: Volume Down

The Embedded EchoPlayer has the following limitations:

- Audio Only presentations will not be displayed.
- Live streaming webcasts **cannot** be viewed in an embedded EchoPlayer.
- For Echoes with two visual capture inputs (Audio/Display/Video, Audio/Display/Display, or Audio/Video/Video), only one of the two visual items will appear, as follows:
    - For A/D/V, users will see the Display input.
    - For A/D/D, users will see the Primary Display input.
    - For A/V/V, users will see the Primary Video input.

Live Webcasting for Academic Staff

In this section:

- [What is Live Webcasting?](#)
- [High-Level Procedure](#)
- [Access the Webcast Presenter View](#)
- [Manage Chat](#)
- [Monitor the Webcast](#)
- [View Attendees of the Webcast](#)
- [Control the Capture of the Live Webcast](#)

What is Live Webcasting?

Live webcasting supports **blended distance learning.** This means that you teach some students ("classroom students") in a traditional classroom environment and other students ("remote students") are outside of the classroom, either all of the time or some of the time:

- The classroom students listen and participate as usual.
- The remote students are each logged in on their own computers, watching the presentation as it occurs. In many cases, these remote students can participate in classroom discussions via the chat application.
- The presentation is also captured and all students can view it later as an Echo. The entire chat log is attached to the Echo. This means that classroom students (who cannot see the chat log during the lecture) can view the chat log when they view the Echo.

Live webcasting makes very little difference to you as a Presenter. You will still:

- Give your lecture
- Answer student questions or lead discussions
- Attach your laptop to the classroom projection devices
- Use the document camera or other in-classroom devices

However, you also have these new capabilities:

- **You can [control the capture](#) of the live webcast.** You can pause and resume the live webcast to allow for class breaks, and even extend the time allowed for the webcast if necessary. You can also stop the webcast if the class or event has finished before the scheduled end time.

- **You can [monitor the webcast](#).** You can monitor the student view of your presentation. This allows you to adjust items as needed during the webcast.
- **You can [include Lecture Tools](#) polls and quizzes** with your presentation, if your institution uses and has integrated Lecture Tools with EchoSystem.

High-Level Procedure

Although webcasting does not differ much from the typical lecture, it does require some additional preparation. We suggest this procedure. Some tasks can be delegated to a Teaching Assistant (TA):

1. Appoint a TA or student to manage chat for you. Delegating this task allows you to concentrate on lecture and discussion. See [Manage Chat](#).
2. [Access the Webcast Presenter View](#) to start the webcast.
3. [Monitor the webcast](#). Verify that remote students can see all parts of the presentation.
4. [View Attendees of the Webcast](#). This shows you how many students are attending the class.
5. Begin the lecture.
6. [Pause and resume the recording as needed.](#)
7. At the end of the lecture, remind students that the recording, which includes the entire chat log, will be

available as part of the Echo. Classroom students do not see the chat log during the lecture.

8. Log out of the EchoCenter.

Access the Webcast Presenter View

The Presenter view of a live webcast is different from the student view:

- Like the student view, the Presenter view contains an Apps pane. However, the Presenter apps are different from the student apps.
- Chat (if available) resides on the main pane of the window. This is shown in the figure below of the default Presenter view.
- The Monitoring app, when enabled, expands in the Apps pane. See Monitor the Webcast for a picture of the Presenter view with the Monitoring app selected.

When the System Administrator configures the section, she can assign multiple Academic Staff roles to the section, such as an Instructor and one or more Teaching Assistants (TA). This allows TAs to use their own logins to access the Presenter view and assist the instructor. The Presenter view of the webcast is available to any Academic Staff configured for the section, regardless of role.

> ℹ️ **Presenter View Only Accessible Through EchoCenter**
>
> In order to see the Presenter View, you must be authenticated as Academic Staff for the section by logging in to the EchoCenter for the section. If you access the webcast using a direct link or through the Monitoring tab of the ESS, you will only see the Student (or Player) view of the webcast and you will not have access to the Presenter tools for the webcast.

To access the Presenter view:

1. Go to the classroom assigned for the class
2. Log in to the EchoCenter page for your class.
3. Click on the join button on the EchoCenter page, shown in the figure below.

4. In the Live Admin section of the window that appears, be sure **Tools** is selected as the view type. If you choose "Player" instead, as shown in the below figure, you will see the student's view of the presentation and will not have access to all of the tools available for Presenters.
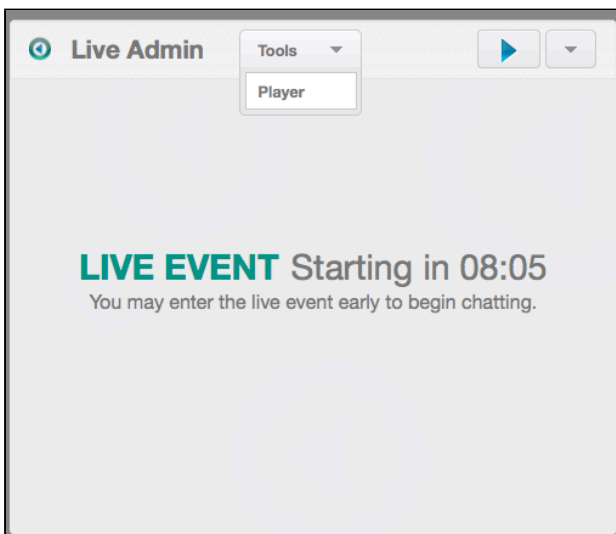
5. Choose the theme (Light or Dark).
6. Click the **Play** button to launch the EchoPlayer.
7. Verify that you are seeing the Presenter view of the live webcast. You should see **Monitoring** and **Capture Control** buttons, along with the other **Apps** listed on the right side of the screen.
8. If you are not seeing the **Monitoring** and **Capture Control** buttons on your screen, you are not configured as or are not logged in as a Presenter for this section. You may need to close your browser and re-access the EchoCenter to log in with the appropriate credentials.

The figure below shows the default Presenter view of a live webcast, including chat entries in the main portion of the window and Presenter apps on the right.
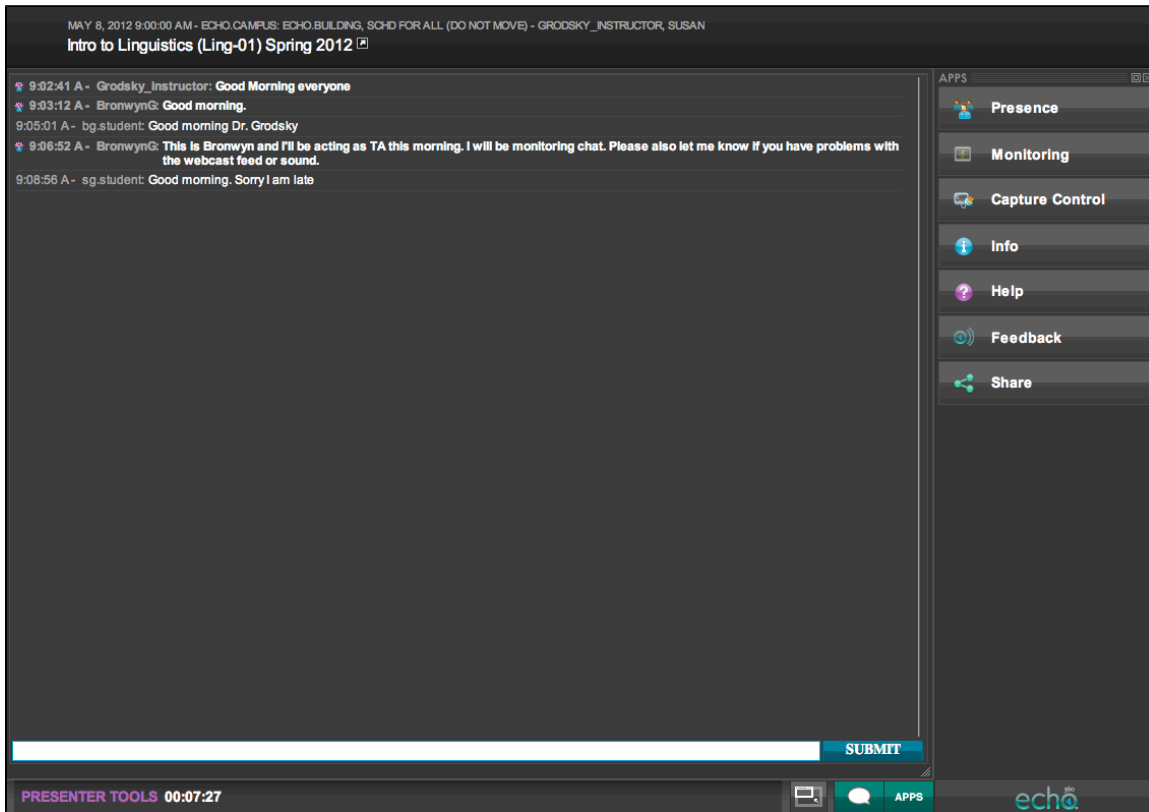
The **Apps** buttons shown may include some or all of the following, depending on which applications the System Administrator has chosen to enable and whether your system uses collaboration features:

- **Presence**, **Monitoring**, **Capture Control**: Appear only for live webcasts and are described in the sections below.
- **Info**, **Help** – Appear for both Echoes and live webcasts.
- **Share**, **Feedback** – May appear for both Echoes and live webcasts. System Administrators can hide or show these buttons.

At the bottom of the screen the **Presenter Tools** toolbar contains:

- A timer, showing how long you have been logged in to the webcast
- Buttons that allow you to show or hide the chat window or the Apps buttons
- A "screen reset" button that reverts the screen to the original configuration, showing both the chat window and the Apps buttons.

Manage Chat

You may want to ask a TA or student to monitor the chat log while you present your lecture. The Chat Monitor can summarize questions and comments from the chat session, presenting them to you for response. Since all students can see the chat log, the Chat Monitor is not required to use the Presenter view. However, since the chat log in the Presenter view (shown above) comprises the majority of the screen, the monitor may find it easier to use the Presenter view than the Student view of the webcast.

Whoever is monitoring the chat log during the webcast must be logged in with an Academic Staff role in order to see the Presenter view of the chat log. Follow these steps:

1. Ask the Chat Monitor to log into the webcast through the LMS or EchoCenter.
2. If the Chat Monitor is a TA and is assigned to section, h/she will see the Presenter view described in the section above.
3. If the Chat Monitor prefers the Presenter view, but lacks the credentials to access it, you can log in to the EchoCenter page (using the Instructor credentials) on the Chat Monitor's computer.
4. As comments arrive, the Chat Monitor can:
    * Read the comment or
    * Save the comments and summarize them for you during the class question period
5. Remind the Chat Monitor to log out at end of class.

Chat entries are processed with the webcast and attached to the Echo. This means that anyone viewing the Echo can also review the chat.

> ℹ️ **When Remote Students Can See Chat Traffic But Cannot Enter Questions**
>
> In rare situations, some students will be able to enter questions (producing chat traffic), while others cannot. Why does this occur?
>
> Only students who have logged in to the EchoSystem may enter questions to the chat application, though all remote students can see the chat traffic.
>
> If the section or event does not require students to log in, most students will not be able to enter questions. However, a few students **may** still be logged in because their credentials carried over from a previous EchoCenter or LMS session. These logged-in remote students will be able to enter questions, producing chat traffic. Other remote students, who are not logged in, will be able to see this traffic, but not enter questions themselves.
>
> Although it is annoying to be prevented from participating during the class, students should contact the System Administrator to resolve the problem.

Monitor the Webcast

You or your TA may want to monitor the webcast to be sure that students are seeing everything you need them to see. Follow these steps:

1. Log into the webcast as an Academic Staff member, to access the Presenter view.
2. Click the **Monitoring** button located in the Apps list, shown in the following figure.
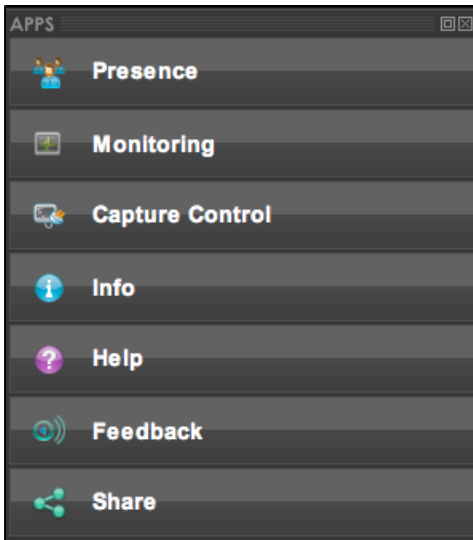
3. The Apps list changes to a **Media Monitor**, showing the visual inputs being webcast, as demonstrated in the below figure. These inputs commonly include:
    *   A video feed, which may be a headshot of you or a shot of the entire classroom
    *   A display feed, showing your PowerPoint or other presentation from the classroom computer.
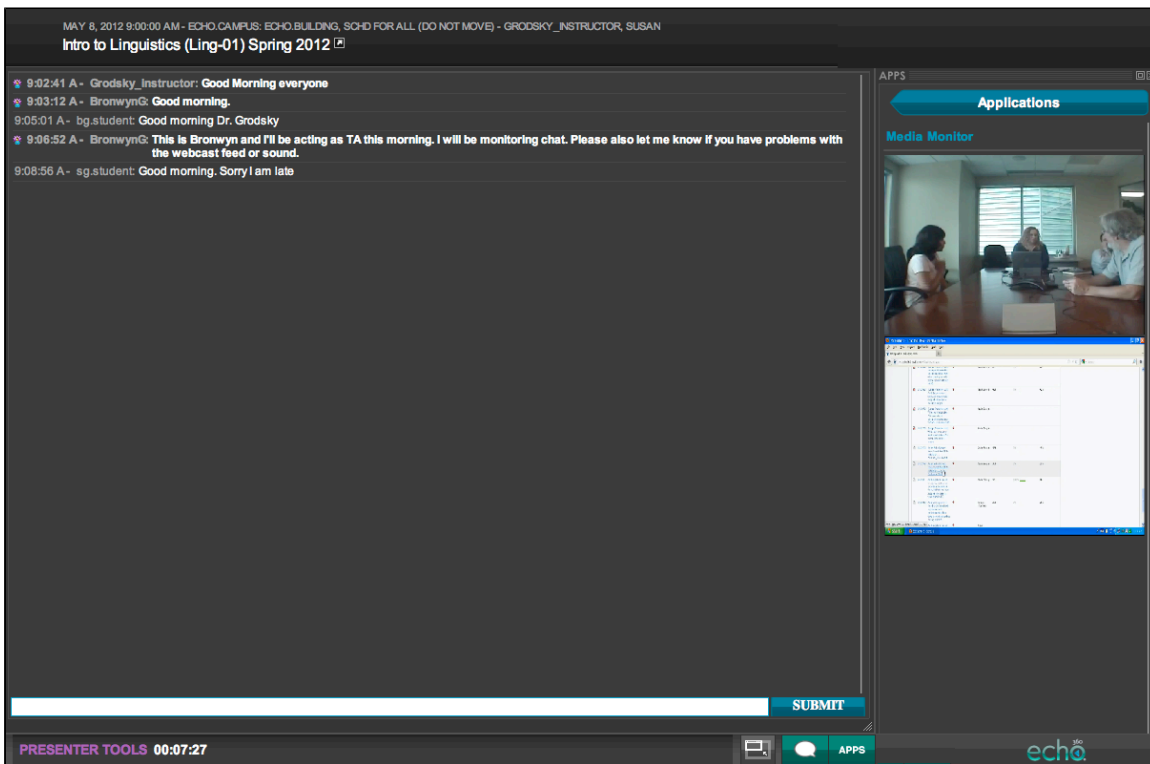
4. You may leave the Media Monitor open for the duration of the class, or you can click the **Applications** button to return the Apps list.

> **ⓘ Monitoring Through the ESS is Not Recommended**
> Some Instructors are in the habit of logging into the ESS interface and monitoring classroom captures and sections through the Monitoring tab. For live webcasts, this method is not recommended. While you see a Monitor link for a live webcast currently being captured, the link only provides the student view of a live webcast, which does not contain the additional monitoring and capture control features available to Presenters. Instructors should always log into their EchoCenter pages and access live webcasts from there, to monitor and control live webcasts.

> **ⓘ Monitoring Through a Mobile device is Not Recommended**
>
> Echo's live webcasting feature is designed primarily for multimedia streaming to a PC or Mac via a broadband network connection. However Echo360 supports the viewing of Live webcasts on iOS devices running iOS 5 and above. Ask your System Administrator if this has been configured at your Institution.
>
> Keep in mind, however, that mobile viewing is subject to the following limitations:
>
> - Viewers will only see the Primary Display (e.g., what is featured on a computer screen during the presentation) OR the Video for the event. They will not see both.
> - Viewers may require a broadband (wifi) connection for the event to stream smoothly.
> - Viewers will only have access to the Student (or Player) view.

View Attendees of the Webcast

You may want to see which students or how many students have logged into the webcast. Follow these steps:

1. Log into the webcast as an Academic Staff member, to access the Presenter view.
2. Click the **Presence** button located in the Apps list, shown in the following figure.
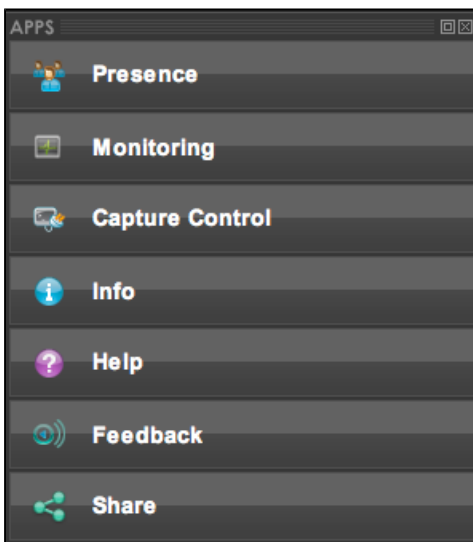
3. The Apps list changes to show a list of who is logged into the webcast along with a tally of the total number of students online, as shown in the below figure. Notice that the Instructor for the webcast is identified with a special icon, and the Instructor's user name is shown in bold. These identifiers also apply to the TA assigned to the section.
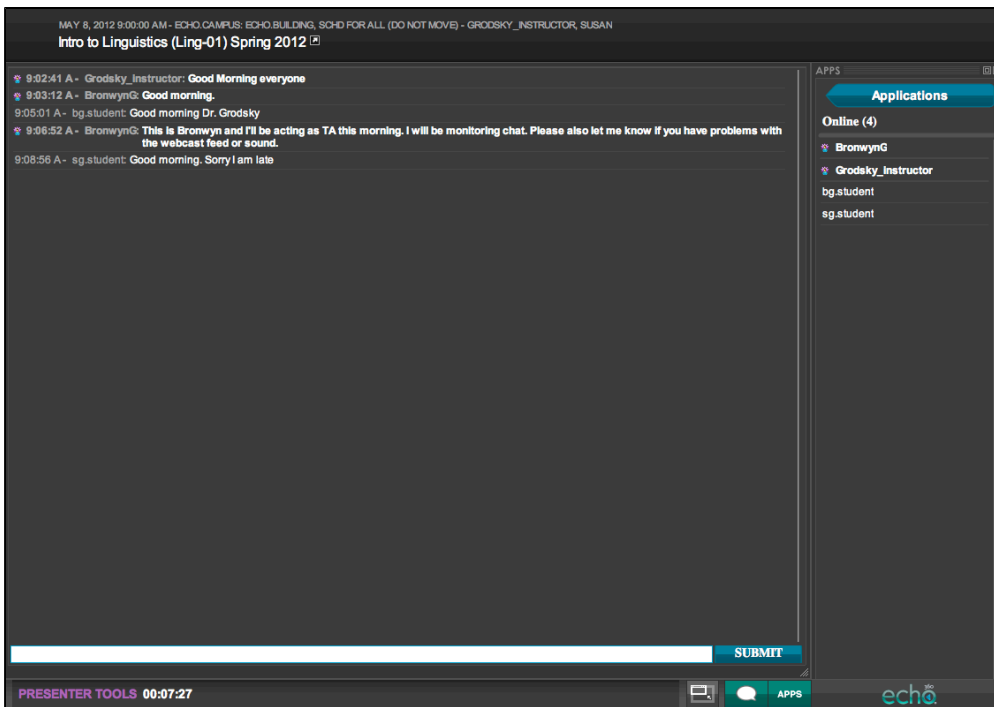
4. You can leave the presence list open for the duration of class, or you can click the **Applications** button to return to the Apps list.

> 🛈 **Why Is Nobody Watching?**
>
> Presence only shows logged in users. If the section or event does not require users to log in, you may see no entries in the presence list, or you may see only a few users, those whose login carried over from a previous EchoCenter or LMS session.
>
> If the presence list is always empty, ask your System Administrator if authentication is required for your section.

Control the Capture of the Live Webcast

You can control the live webcast of your class in the same way you would control an Ad Hoc recording of a class (see Classroom Capture for Academic Staff). You can also extend a webcast beyond its scheduled end time if necessary.

In most cases, your primary use of the capture control feature of a live webcast will be to pause and resume the webcast as needed, though you also have the option to start the webcast early or stop the webcast, or to extend the webcast beyond the scheduled time.

Pausing a webcast may be useful for short breaks in the class, or for taking time to set up a classroom activity that may not need to be captured or broadcast. However, the end time/duration of the scheduled class remains the same, so pausing for these is not necessary.

If you do decide to pause the webcast, keep in mind the following:

- While paused, anything that happens in the room is not broadcast to remote students and is not captured in the Echo.
- Remote students will see a dark screen with two vertical lines, resembling a Pause symbol. When the

webcast is resumed, remote students will again see the broadcast activity from the venue.
- Since remote students will only see a pause symbol, as a courtesy you should:
    - Explain that you are pausing the webcast and why. Use the chat feature, if available, to provide this information on the screen during the pause as well as verbally prior to pausing.
    - State when the webcast will resume. Again, use the chat feature, if available, to provide this information on the screen during the pause.
    - Ask remote students to keep their browsers open, remain logged in, and watch for the webcast to resume.

The pause/resume/extend functionality is accessed through the capture device's web interface, the same way Ad Hoc recordings are accessed and manipulated. Follow these steps:

1. Access the Presenter view of the live event using an instructor login.
2. From the Apps buttons located on the right side of the screen, click **Capture Control**, shown in the figure below.

3. From the Capture Control panel, click **Capture Device**, shown in the figure below.
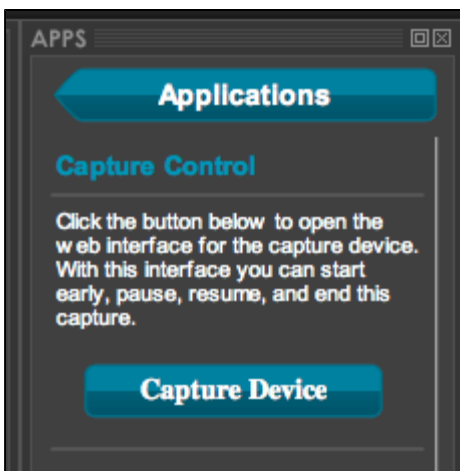
4. A browser window appears, requesting a login. Log in as an Instructor. This opens the capture interface for the device, shown below.
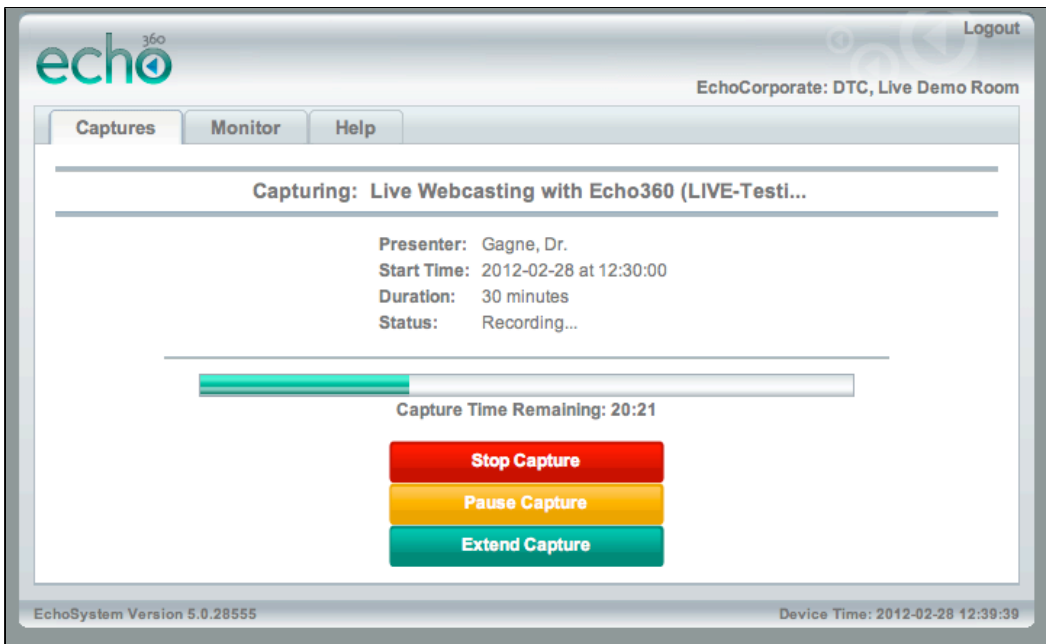
5. Use the **Stop Capture**, **Pause Capture/Resume Capture**, and **Extend Capture** buttons, described below, to manipulate the live webcast as needed.
    - **Stop Capture** - Stop the capture immediately, regardless of time remaining in the schedule.
    - **Pause Capture** - Temporarily suspends the broadcast. Once paused, the button changes to **Resume Capture**.
    - **Resume Capture** - Continues the broadcast. Once resumed, the button changes to **Pause Capture**.
    - **Extend Capture** - Allows you to add time to the scheduled event, up to 30 minutes per request (with no total limit). You cannot extend the time of a webcast past the start time of the next scheduled capture for the device.
6. When finished, minimize or close the browser window to return to the Presenter view of the live webcast.

Manage Echoes for Academic Staff

In this section:

- Overview

Overview

As you build up a library of Echoes, you may want to manage them in various ways, as suggested in the table below. Some tasks are done on the EchoCenter page for the section. For others you navigate to the **Echoes** > **Echoes** page on the EchoSystem Server (ESS), then use the buttons in the toolbar shown below.
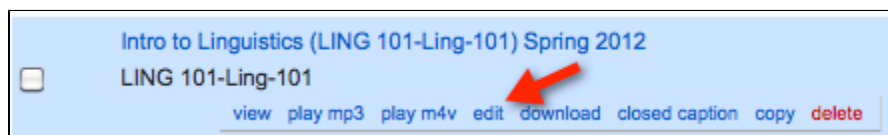
Task	Where Done
Copy an Echo (from one section to another).	ESS

Edit the title and description. These changes can suggest detail and give context to students, helping them understand the Echo. See Improve Learning - Add Descriptions for Each Echo.	EchoCenter
Make an Echo available or unavailable for viewing.	EchoCenter
Archive or unarchive an Echo.	ESS
Add a publisher to an Echo. If students cannot access an Echo that you know you published, you can edit the Echo to add a publisher for the Echo manually.	ESS
Play the mp3 (podcast) version of the Echo.	ESS
Play the mp4 (vodcast) version of the Echo.	ESS
Download the entire Echo as a zipped file.	ESS
Download the mp3 file for closed captioning. A System Administrator might do this when giving an Echo to a service that adds closed captions.	ESS
Delete an Echo for Academic Staff.	ESS

Copy an Echo

In this section:

- Overview
- Procedure

Overview

When you copy an Echo, you copy it from one section (the "source section") to another (the "destination section"). You might want to do this for many reasons.

For example, you might teach both a basic Linguistics course (Linguistics 101) and a more advanced course in phonology (Linguistics 121). You are about to present an advanced topic to the phonology class, but you want to make sure that your students have absorbed some principles that you presented in Linguistics 101. Follow these steps to copy the Echo.

1. Copy the Echo from Linguistics 101 to Linguistics 121. This gives students access to the Linguistics 101 Echo.
2. **Best practice**: Edit the title and description of the copied Echo in the destination section.
   - You do this because the listing on the EchoCenter page does not look the way you might expect.
   - Because the Echo was captured for the Linguistics 101 class, the title is Linguistics 101.
   - Students may be confused when they see an Echo titled Linguistics 101 on the EchoCenter page for Linguistics 121.
   - You can explain this to your students or you can edit the title and description instead.
   - See Improve Learning - Add Descriptions for Each Echo.
3. Suggest to students that they review the Linguistics 101 Echo.

> **ⓘ Why Do I Have to Copy the Echo?**
>
> You must copy the Echo because students can view **only** Echoes associated with their courses. You teach both courses and can view both sets of Echoes. Linguistics 101 students can view only Echoes associated with Linguistics 101. Linguistics 121 students can view only Echoes associated with Linguistics 121.

Discussions, chat, and bookmarks associated with the original Echo are not copied to the new Echo.

Procedure

A copied Echo is initially marked as Unavailable. This procedure shows how to copy an Echo and make the new Echo available.

> **ⓘ Alternate Option: Use EchoCenter to Make Copied Echo Available**
>
> The procedure uses the ESS method for making the copied Echo available through the ESS. We assume that you want to make the Echo available as soon as it is copied. However, you can also make the Echo available through the EchoCenter.

Follow these steps.

1. Log in to the EchoSystem Server (ESS) as an Instructor.
2. Navigate to **Echoes** > **Echoes**.
3. Find the Echo you want to copy ("the source Echo"), as shown below. All Echoes for the section have the same title but the dates are different.
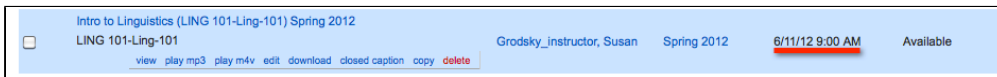
4. Hover over the Echo and click **copy.**
5. Specify the destination term, course, and section. Click **Copy**.
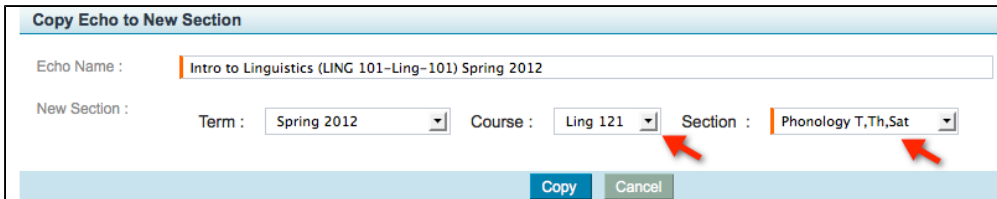
6. Review the Echo Details page for the new Echo.
   a. Notice the success message at the top of the page.
   b. Notice that the new Echo is marked as **Unavailable**.
   c. Click **Done**.

7. Make the new Echo available.
    a. In the Echoes list, click the **Unavailable** tab. Find the new Echo.
    b. If the list has more than one Echo, check the one you want to make available.
    c. In the drop-down list, select **Make available.**
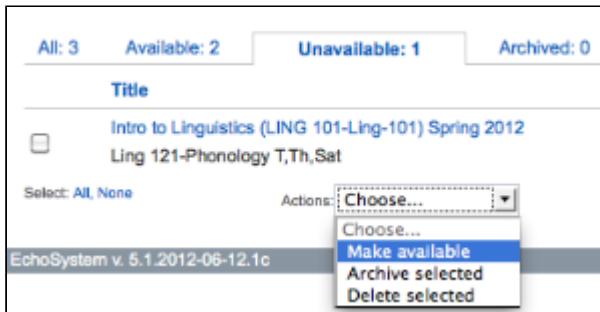
    d. Click the **Available** tab.
    e. Notice that the Echo is now available. It still has the title of the source section ("Intro to Linguistics" in this example) but is now associated with the destination section ("Ling 121-Phonology T,Th,Sat" in this example).
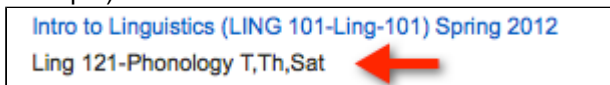
8. After some time, the Echo also appears on the EchoCenter page. It is easy to recognize because, although most Echoes have the title of the destination section ("Phonology" in this example), the copied Echo has the title of the source section ("Intro to Linguistics" in this example).

9. **Optional**: Edit the title and description of the Echo. See Improve Learning - Add Descriptions for Each Echo.

Make an Echo Available or Unavailable for Viewing

In this section:

- Overview
- Make an Echo Unavailable
- Verify that an Echo is Unavailable
- Make an Echo Available

Overview

You might want to make an Echo as unavailable for many reasons. For example, you might want to review it, or have a guest speaker review it, before making it viewable by students. You can make the Echo available later.

When you make an Echo unavailable, students can still see it listed on their EchoCenter pages if they view unavailable Echoes.

> ☑ **Best Practice: Tell Students When You Mark an Echo as Unavailable**
>
> Students may ask why an Echo is unavailable. If you announce that it is unavailable in class, you can forestall questions and speculation.

Make an Echo Unavailable

This example shows you how to make an Echo unavailable.

1. Navigate to the EchoCenter page for the section.

2. Find the Echo you want to make unavailable.
   - All Echoes for the section have the same title, the title of the section, unless you have changed it.
   - Look for the date beneath the Echo.
3. Click the **Information** tab, as shown in the figure below.

4. Click **Make Unavailable**, as identified in the above figure.

Verify that an Echo is Unavailable

Changes to Echo availability are made as quickly as the ESS allows. It make take take several minutes or may happen immediately. Use the following steps to verify that the Echo is now marked as "unavailable" in the EchoCenter.
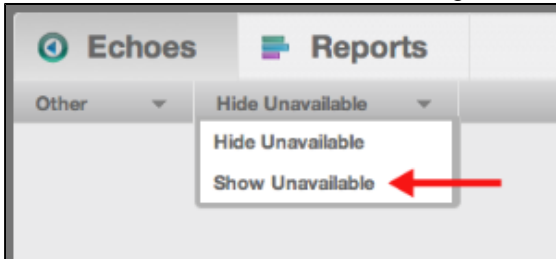
1. If necessary, navigate to the EchoCenter page for the section.

2. Click the Available Echoes drop-down list and select **Other**, as shown in the below figure.
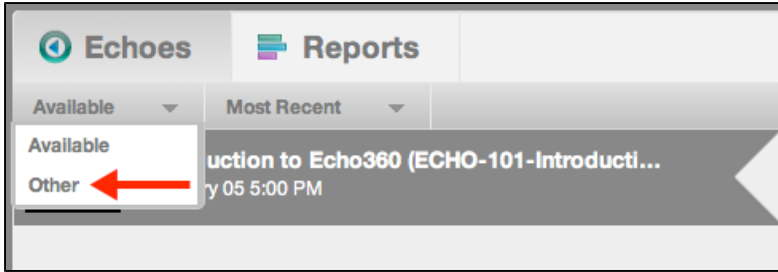
3. The "Other" Echoes list may appear empty. Click the Hide Unavailable drop-down list and select **Show Unavailable**, as shown in the below figure.
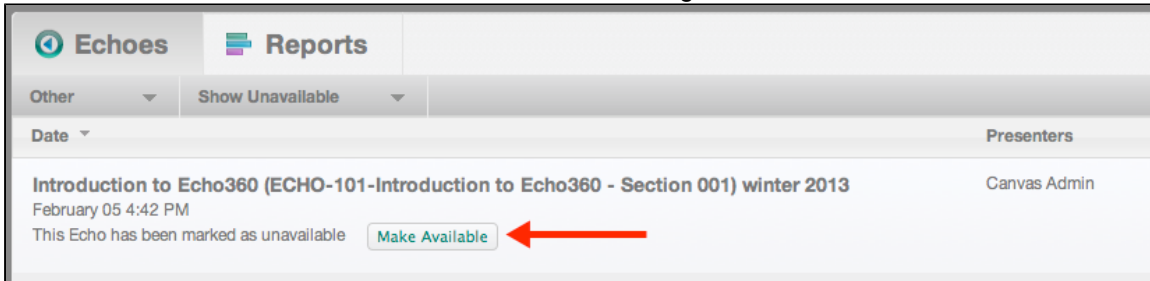

4. Notice that all Echoes currently marked as "Unavailable" now appear in the list, shown below.
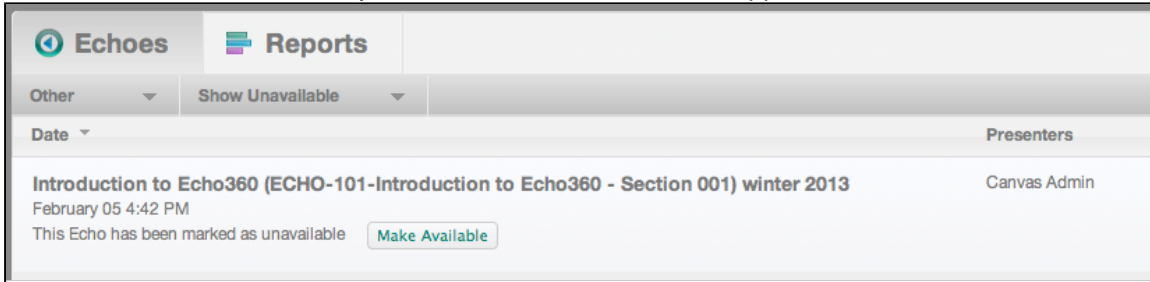
Make an Echo Available

1. Display unavailable Echoes. See Verify that an Echo is Unavailable.
2. Click the **Make Available** button, identified in the below figure, to make the Echo available for students.

Archive or Unarchive an Echo

In this section:

- Overview
- Procedure

Overview

Your System Administrator may ask you to archive Echoes or you may choose to do so yourself. Archived Echoes are often stored in a tape backup or other offline media. These forms of storage cost less than those used by active Echoes.

Archived Echoes are not available to students. To make an archived Echo available, unarchive it.

You may want to archive all the Echoes for a particular course or section. To do so, follow these steps.

1. Select **Course** in the **Filter By** drop-down box.
2. To select all the Echoes for the course, click **Search**. To select all of the Echoes for a particular section of the course, select the section (as shown below) then click **Search**.

3. You now have a list of all of the Echoes for the course or all of the Echoes for the section. Use either the All Displayed or All in Filter option to select all items in the list.

4. Continue with the procedure below to archive all the selected Echoes.

Procedure

This procedure shows how to archive an available Echo. Modify this procedure to unarchive an Echo that has been archived.

1. Log in to the ESS as an Instructor.
2. Navigate to **Echoes** > **Echoes**.
3. Click the appropriate tab to display the Echo you want to archive. To archive an Echo, click the **Available or Unavailable** tab. To unarchive an archived Echo, click the **Archived** tab.
4. Select the Echo.
5. In the Actions drop-down list on the bottom of the page, select **Archive Selected**.
6. In the pop-up box that appears, do one of the following:
     - Select the archive where the Echo will be saved
     - Click **Add New** and specify a new location

7. Click **Continue**.
8. Notice the progress message at the top of the window.
9. To verify that the Echo was archived, do one or both of the following:
     - Click the **Archived** tab. Notice that the Echo is listed.
     - Notice that the numbers of Echoes in the tabs have changed. The number of Echoes in the **Archived** tab is increased by one. The number of Echoes in the **Available** or **Unavailable** tab has decreased by one.

Delete an Echo for Academic Staff

In this section:

- Overview
- Procedure

Overview

When you delete an Echo, you delete it permanently. It cannot be retrieved after being deleted. Before deleting an Echo, consider these alternatives:

- **Make the Echo unavailable.** If you want to keep the Echo but do not want students to view it, you can make the Echo unavailable. When you make an Echo unavailable, students can still see it listed on their EchoCenter pages but cannot view it. You can make the Echo available when you want students to view it. See Make an Echo Available or Unavailable for Viewing.
- **Archive the Echo.** You can also move Echoes to an archive location. Students do not see archived Echoes on their EchoCenter pages. See Archive or Unarchive an Echo.

> ⓘ **Deleting a Lot of Echoes?**
>
> If you are performing a large-scale deletion of Echoes, or other users have repeatedly deleted presentations and other media from the system, refer to Deleting Objects from the System. This section provides technical information regarding how deletions work as well as a Best Practice tip for defragmenting and re-indexing your database.

Procedure

1. Navigate to **Echoes** > **Echoes**.
2. Select one of the tabs (All, Available, Unavailable, Archived). Note the number of items listed (Example: **Available: 78**).
3. If you can easily do so, use the Search options to list only the Echoes you want to delete.
4. Do one of the following:
   - To delete a single Echo, hover over the Echo and click **delete**.
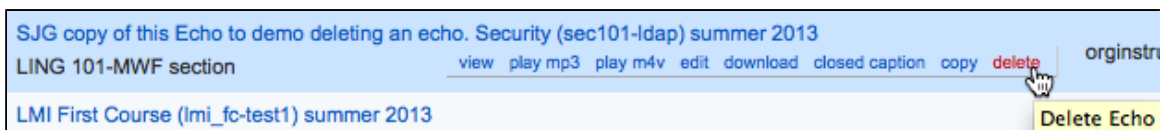
   - To delete multiple Echoes:
     a. Check the Echoes you want to delete, either individually or using the Select links at the bottom

of the page, highlighted in the below figure.
  b. Scroll to the bottom of the page. Select **Delete permanently** from the Actions drop-down list, also shown in the below figure

☑	Capture88 sec101-ldap	orginstructor sn	Summer 2013	7/3/13 5:00 AM	Available
☑	Capture87 sec101-ldap	orginstructor sn	Summer 2013	7/3/13 4:50 AM	Available
☑	Capture86 sec101-ldap	orginstructor sn	Summer 2013	7/3/13 4:40 AM	Available
☑	Capture85 sec101-ldap	orginstructor sn	Summer 2013	7/3/13 4:30 AM	Available
☑	Capture84 sec101-ldap	orginstructor sn	Summer 2013	7/3/13 4:20 AM	Available

Select: All 20 (of 46) Displayed Above, All 46 in Filter, None   Action ✓ Choose...   1 - 20 of 46 |◀ ◀ ▶ ▶|
                                                                          Make unavailable   View: 20 ⬍ Echoes per Page
                                                                          Archive selected
EchoSystem v. 5.3.2013-   Delete permanently | Logout

5. Confirm that you want to delete the item(s).
6. Notice the confirmation message at the top of the page.
7. Refresh the page. Notice that:
   - The Echo is deleted from the list
   - The number of items listed for the tab is smaller

If Echoes Are Not Being Published

In this section:

  - Overview

Overview

Typically, Echoes are published automatically. On rare occasions, an Echo is not published or publishing is delayed. If students say that they cannot access an Echo that you believe you have published, ask your System Administrator to investigate. The System Administrator must ensure that a publisher is correctly configured for your section.

Edit Echoes for Academic Staff

In this section:

  - Overview
  - Open the File
  - Select the Content to be Edited
  - Specify Edits
  - Commit Edits
  - Preview the Edited File
  - Save (or Save and Process) the Edited File
  - Save a Copy to a Different Course or Section
  - Troubleshooting - If Editing Fails

Overview

You can edit either an Echo (a captured lecture) or additional materials (imported media). For both types of files you can:

- Remove a segment from the middle. You might want to remove:
    - Some student remarks
    - An exam review
- Remove either the beginning or end sections ("trimming top 'n tail"). You may want to do this to remove unnecessary material.

If the Echo contains:

- Both audio-video and display (such as a PowerPoint file), you can edit either the video, the display, or both
- Only audio-video, you can edit the video only

To edit a file, do the following:

1. Open the file to be edited.
2. Select the content to be edited. You do this only for files that contain both VGA and video.
3. Specify the edits to be made.
4. Commit edits, if applicable.
5. After editing the file, you can do the following:
    - Save the file. This command commits your edits but does not publish the file to students.
    - Save and process the file. This command commits your edits and makes the file available to students.
    - Save a copy to a different course or section.

> ⚠ **Save in the Editor is Different From Copy in the ESS**
>
> When you save a copy of a file in the Editor, the new file created has the edits you have applied. When you copy a file in the ESS, the new file created is a duplicate of the **original** file, even if you have applied edits to it.

Open the File

1. Log in to the EchoSystem using your Academic Staff user name and password.
2. Navigate to **Echoes** > **Echoes**.
3. Click the relevant tab. Clicking the All tab ensures that your file appears in the list.
4. In the file list, hover over the relevant file until the buttons appear, as shown in the figure below.
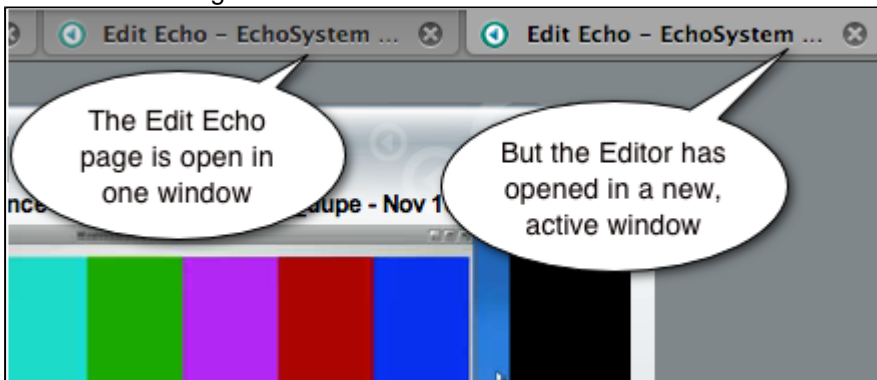5. Select **edit**.
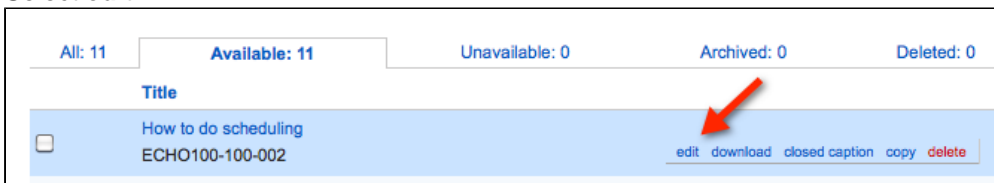
6. Scroll to the bottom of the page and click **Edit Media**, as shown in the figure below.
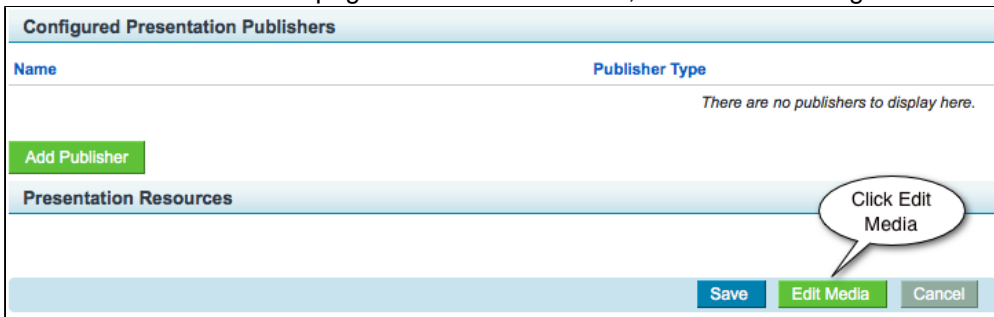
7. Wait while the Echo360 Presentation Editor loads.
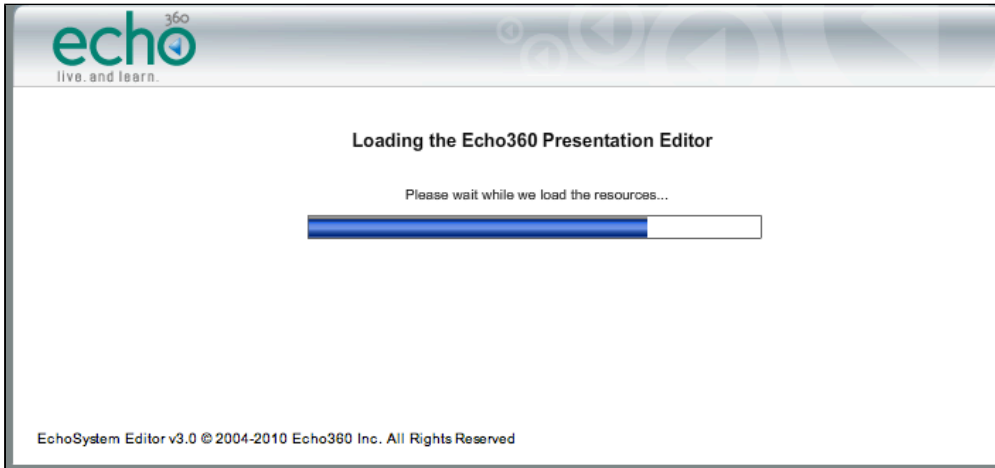
8. Notice that the Editor is open in a new active window, but the Edit Echo page is still open in another window, as shown in the figure below.

Select the Content to be Edited

In the Content Pane, click one of the thumbnails in the lower right corner to display either the video or the display content, such as a PowerPoint file. In the figure below, video is displayed.
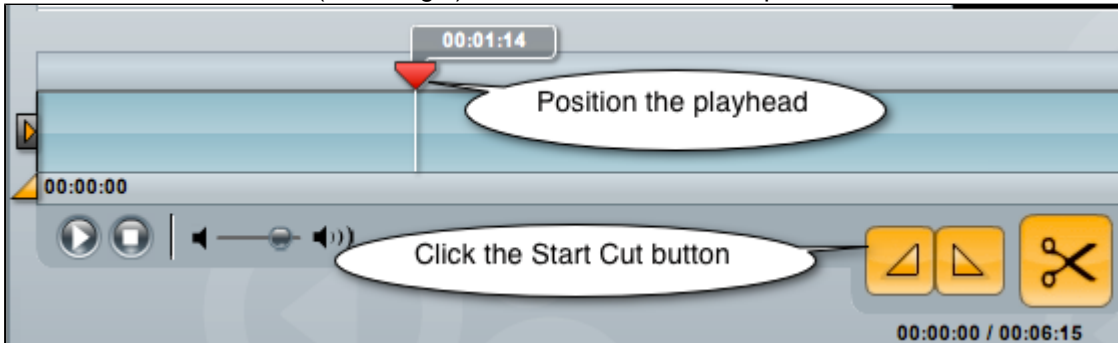

Specify Edits

Specify a Segment to Remove

You can use either the playhead and buttons or the left and right markers to mark the beginning and end points of the segment to be cut.

To use the playhead and buttons:

1. Position the playhead at the start of the cut.
2. Click the **Start Cut** button (left triangle). This marks the start cut point.

3. Position the playhead at the end of the cut.
4. Click the **End Cut** button (right triangle). This marks the end cut point.
5. Click the **scissors** (Cut) button.

To use the markers:

1. Drag the left marker in to the start of the cut.
2. Drag the right marker in to the end of the segment.
3. Click the **scissors** (Cut) button.

4. Notice that the cut areas appear gray on the timeline, as shown in the figure below.
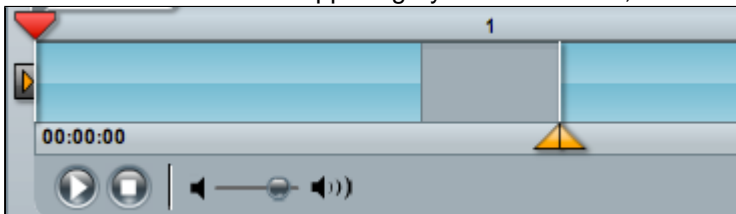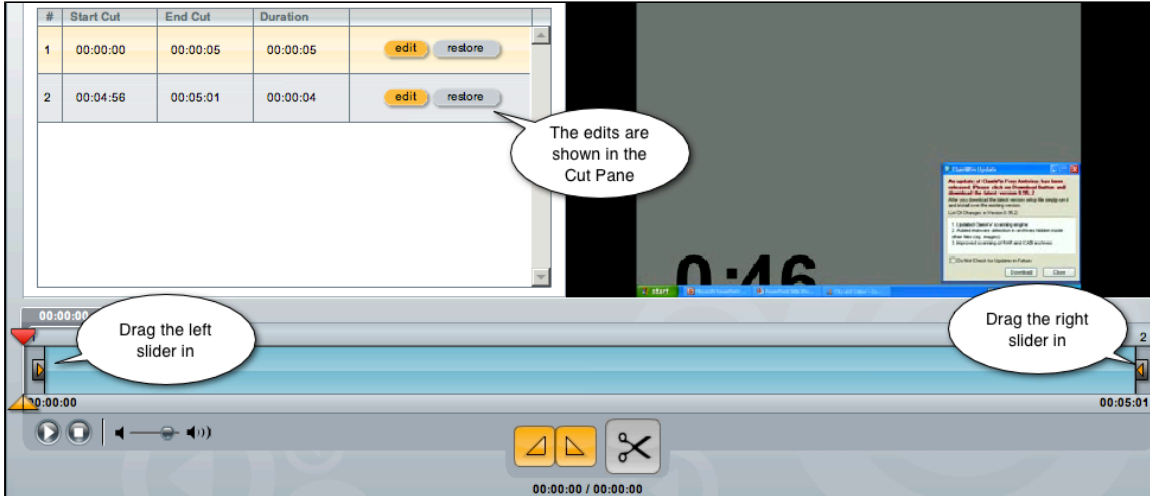

> ℹ **Notice the Cuts Pane**
>
> The edits are shown in the Cuts Pane.

5. Commit the edits. See Commit Edits.

Specify that the Beginning or End of the File be Removed

1. Drag the left slider in to remove the beginning of the file.

2. Drag the right slider in to remove the end of the file.
3. Notice that the edits are shown in the Cuts Pane, as shown in the figure below.

4. At this point, you can either preview the edited file or save it.

Edit Cuts Using the Cuts Pane

1. Select the relevant row in the Cuts Pane.
2. Click **edit**.
3. Change the values for **Start Cut** or **End Cut**, as shown in the figure below.
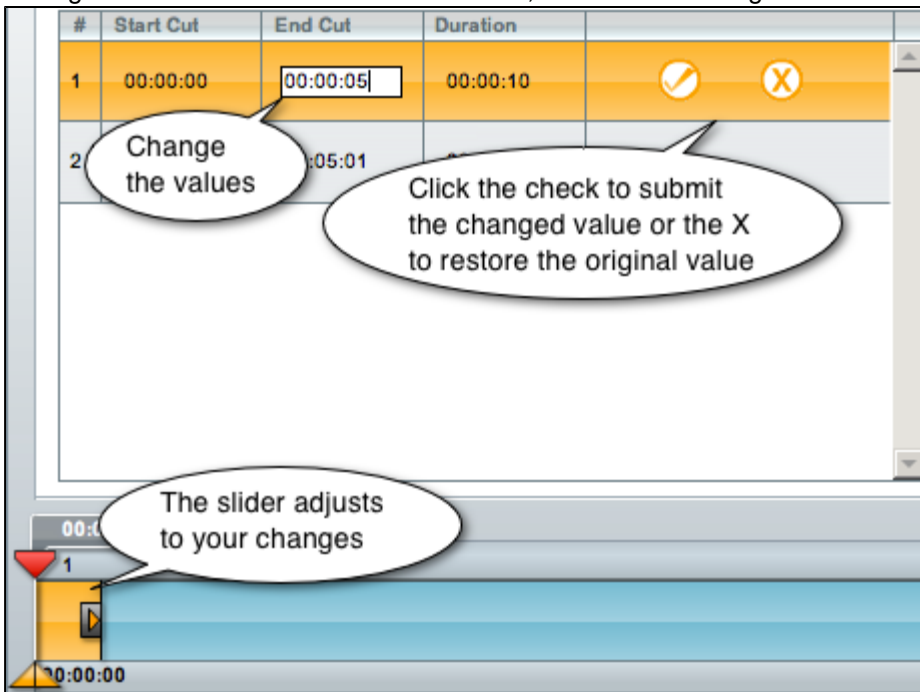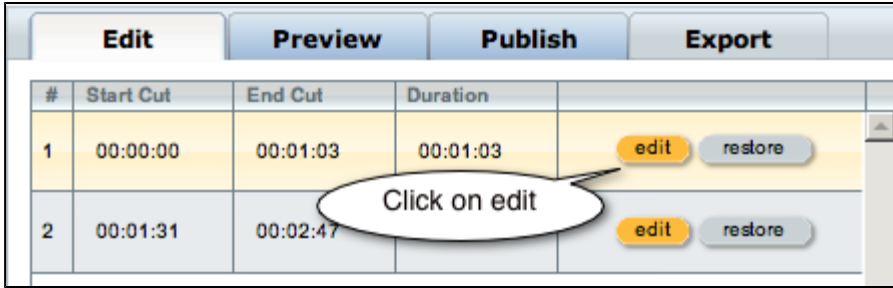

> ℹ **Commit the Edits to Make Them Take Effect**
>
> At this point, you have specified edits, but they will not be made until you commit them in the Cuts Pane. See Commit Edits.
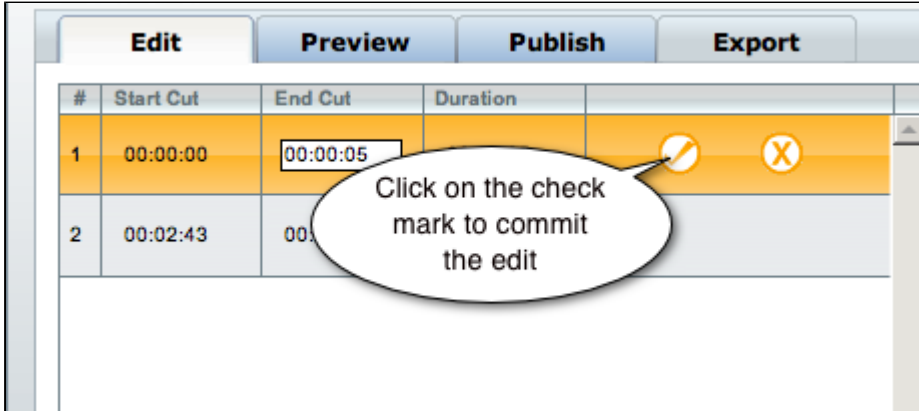
Commit Edits

1. In the Cuts Pane, click **edit** for each of the edits you want to commit, as shown in the figure below.

2. Click on the check mark to commit the edit, as shown in the figure below.

3. Do this for each of the cuts you want to commit.
4. If you decide you do not want to make the edit, click **restore**.

Preview the Edited File

1. Click the **Preview** tab.
2. Click the **Play** button.

Save (or Save and Process) the Edited File

1. Click the **Save** tab. The Edit Overview provides a summary of the edits and the new duration.
2. In the Version Description field, enter a title that describes the edits you made.
3. Click either **Save Edits** or **Process Edits**, as identified in the figure below.
   - **Save Edits** commits your edits but does not publish the file to students.
   - **Process Edits** commits your edits and makes the file available to students.

4. Look for a confirmation message saying that the edited media file has been submitted.
5. If you see an error message, take a screen shot of it and forward it to your System Administrator.
6. Expect an e-mail advising you that the file is ready for viewing.
7. To close the Editor, close the tab. The Edit Echo window (which has the details on the Echo you just edited) is now the active window.
8. After the edited file has been processed, notice that:
   - The title you entered in the Version Description field (which described the edits you made) is listed in the Presentation Media Edits section.
   - Two new buttons (**Reprocess Media** and **Restore Unedited Media**) have appeared at the bottom of the Edit Echo window, as shown in the figure below.
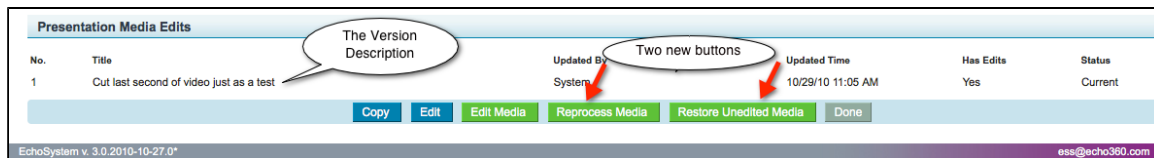
9. Click **Restore Unedited Media** to delete all of the edits made in every editing session. This restores the file to its original state.

## Save a Copy to a Different Course or Section

After you have edited an Echo, you can save a copy (or "save new") to a different course or section.

Follow these steps.

1. In the Editor, make all of the edits you want.
2. Save the file, using either the **Save Edits** or **Process Edits** options.
3. Click the **Save New** tab.
4. Populate the fields.

Field	Comment
Title	Title for the Echo. You may want to use the same title as you did for the edited Echo. This Echo is an exact copy of it.
Description	You may want to describe why you are exporting this Echo to a different section.
Version Description	Describe the edits made to the Echo. You may want to use the same description as you did for the edited Echo. This Echo is an exact copy of it.
Term	The term ("Winter", "Spring") that you are associating the Echo with. This can be the same as the edited Echo.
Course	The course that you are associating the Echo with. This can be the same as the edited Echo.
Section	The section that you are associating the Echo with. This can be the same as the edited Echo.

5. Click **Save**. A dialog box advising success appears, as shown in the figure below.
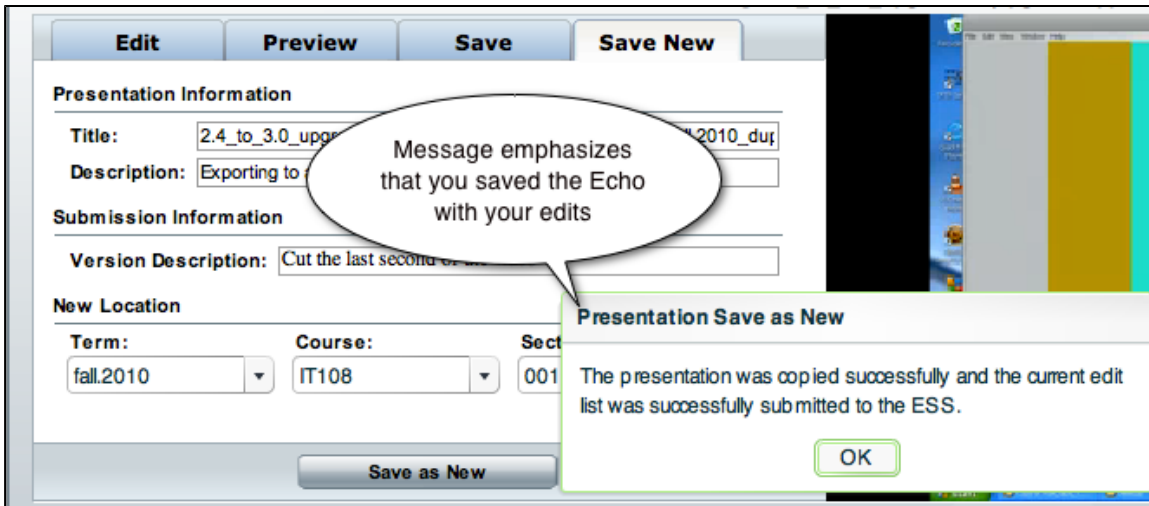
6. To verify that the Echo was exported successfully:
    a. Navigate to **Echoes** > **Echoes**.
    b. Find the new Echo in the list.

Troubleshooting - If Editing Fails

On rare occasions, you receive an error message when you attempt to save an edited Echo.

This may be caused by an over-full **.tmp** directory. Your System Administrator can correct this by changing the temporary storage location. See Best Practice - Establish a Temporary Storage Location.

Import Other Media for Academic Staff

In this section:

- Overview
- Tools and Formats Supported
- Choose and Upload Media

Overview

Although you probably use the EchoSystem primarily to record class lectures, you might also want to use it to preserve and distribute other materials.

If you are an Academic Staff member, as the Instructor for a section you might want to:

- Upload a video that students should view before discussing it at a class meeting
- Upload materials that expand on a particular lecture
- Upload materials not linked to any specific section, but share them with students

If you are a System Administrator, you might be asked to:

- Distribute a guest lecture given at the university by a distinguished alumnae
- Distribute an address given by the university president to colleagues

You can upload any of these materials to the EchoSystem then edit and manage them as you would an Echo.

EchoSystem calls these materials "other media" because they are not captured by the EchoSystem. Instead, you upload them yourself. The process of uploading an external file is called "media import".

You can:

- Upload multiple files to a specific section, though you must upload them one at a time.
- Upload files that are not associated with any class or any meeting
- Upload as many files as you like, though your System Administrator may limit the total amount of media you can upload to a section
- Edit files with the standard Echo editing tools

Tools and Formats Supported

Echo360 supports the file types listed below. These have been tested.

Echo360 will add support for additional tools and formats. If you use a format not listed here, you can attempt to ingest it. Other formats may work although they have not been tested.

If the format you use fails to process correctly, especially in the case of video files, it is likely that the video file format is not fully compatible with our encoding software. We suggest you attempt to re-encode the video into one of the supported formats (listed below) via a 3rd party video encoding software, and then use that as the source file for another media import attempt. Alternately you can enter a support request to suggest we add support for the format you are using.

> **ℹ Media Import Supports Stereo Audio Only**
>
> Media import does not support multi-channel audio.

Audio and Video / Audio and Screen

The following table lists the currently tested and supported combination audio and video file types.

Video File Format	Video Codec	Audio Codec
AVI	CVID, TSCC	PCM
FLV	VP6F	MP3
M4V	H.264	AAC
MP4	H.264, AVC1	AAC
MOV	H.264, MPEG-4 (mp4v), DV	AAC, MPEG-4 (mp4a)
WMV	WMV9	WMA
MOV	H.264, MPEG-4	AAC
MP4	H.264, MPEG-4	AAC

M4V	H.264	AAC
M4V	H.264	AAC
AVI	DV	PCM
MOV	H.264, CVID	AAC, PCM
WMV	WMV9, VC1	WMA9
MP4	H.264	AAC
WMV	WMV2	WMA2
AVI	CVID	PCM

Audio Only

The following table lists the currently tested and supported audio only file types.

>Audio File Format	Audio Codec
MP3	MP3
WMA	WMA2

Choose and Upload Media

1. Log in to the EchoSystem.
2. Navigate to **Echoes** > **Media Import**. The Media Import screen appears, containing the necessary fields for import.

3. Click **Choose File** to select the file you want to import.

4. Click **Upload** to upload the file to the ESS. The upload process also verifies the media file as valid for use. Note that you will not see any upload status, and large files may take a long time. The URL address bar of the browser may indicate that the page is loading, and this may be your only indication of file upload progress.

5. Once the upload is complete, the Media Import page refreshes to show the verified items, and now includes a **Delete Uploaded File** button, to use if there is a problem. The figure below shows the updated page.

6. Use the drop-down lists to select the **Term**, **Course**, and **Section** to which you want to publish the uploaded item.

7. The **Section Quota** field shows the amount of space used and the total amount available for media imports, if a quota is configured for the section.

8. **Start Date** and **Start Time** can be used to identify a particular date and time to which the uploaded media item applies, such as a particular class lecture or a guest lecture event. By default, these are set at the current date/time (the time and date that the item is uploaded).

9. Enter a **Title** that identifies the item for students.

10. Enter a **Description** for the item to advise students what the media import is and its purpose, or other relevant information to provide context for the item.

11. Select a **Media Type**. This selection determines the type of output that will be produced from the uploaded file. Your options include:

    - **Audio Only** - Media files that contain only audio.
    - **Audio and Video** - Media files containing visual motion, such as a web clip, files created using a standard video camera, web camera, or from a DVD source.
    - **Audio and Powerpoint or Low Motion Video** - Media files containing a recording of a presentation made on a computer or other display device where readability is critical.

12. Once the file is uploaded and the fields are filled in, click **Next**.

13. You may see a page where you can select the **Product Group** for the imported media. If you do not, skip to the next step.

14. If applicable, select a **Product Group** from the drop-down list shown in the below figure. This determines the

type of output product generated from the uploaded file. Note that depending on how the section is configured, you may have only one selection.

15. Click **Start Processing**. The Processing Details page appears, shown in the below figure, listing the details of the file you imported.

16. Click **Upload Another Media File** to import another media file.
17. After the material is uploaded you can edit it with the usual tools. If you are a System Administrator, you can also add closed captioning.

Capture Software Failure Handling and Recovery

In this section:

- Overview
- Required Audio Device Missing
- Video or VGA Input Device Stopped Delivering Frames
- USB Input Device Unplugged
- User Logout or Graceful Restart/Shutdown
- Hard Shutdown or Loss of Power
- Force-Closing Application
- Loss of Internet Connectivity
- Video Card and Driver not DirectDraw Compatible

Overview

With the release of EchoSystem Service Pack 5 (5.4.2014-12-19.3), the Classroom Capture and Personal Capture for Windows applications have been updated to include a number of improvements related to capture reliability and proper handling of failure scenarios. These new features include:

- System tray notifications when USB input devices are disconnected or unavailable during scheduled

recordings
- Delaying graceful logout, restart, or shutdown events in order to finalize capture media
- Finalization of capture media after events such as hard reboot, power loss or forced application closure
- Ability to connect a missing audio device before or during a scheduled recording
- Notifications for loss of network connectivity and incompatible display drivers

These features are currently not available in the Mac version of Personal Capture. The following sections outline specific details on what to expect during each failure scenario.

Required Audio Device Missing

Scheduled Recording (Classroom Capture Only)

Prior to the start of a scheduled recording, if the selected audio device (as defined on the **Configuration** > **Devices** > **Device Details** page in the EchoSystem Server) is not connected to the machine or is unavailable to the Classroom Capture software, a balloon notification message will appear in the system tray informing the user. For example:

When this occurs, the application expects the audio device to be re-connected and there are three final outcomes:

- If the audio device is re-connected before the scheduled start time, recording will proceed as planned.
- If the audio device is re-connected after the scheduled start time and during the recording window, the final Echo produced will contain content starting from time the audio device is accessible again.
- If the audio device is never connected, the scheduled recording will not start.

Ad hoc Recording (Classroom or Personal Capture)

You will be unable to start an ad hoc recording if the audio device is unavailable. The **Record** button will be grayed-out.

Video or VGA Input Device Stopped Delivering Frames

In certain situations, USB webcams or display devices will stop delivering frames to Classroom or Personal Capture due to a lack of available system resources or a failure of the hardware itself. In this case, the following message will appear:

We have stopped receiving a signal for this capture. Your capture is now being finalized and uploaded to the server.

The recording will be stopped, finalized and uploaded to the server automatically.

USB Input Device Unplugged

Scheduled Recording (Classroom Capture Only)

During a scheduled recording if a selected USB audio or video input device (as defined on the **Configuration** > **Devices** > **Device Details** page in the EchoSystem Server) is unplugged from the machine, the following balloon
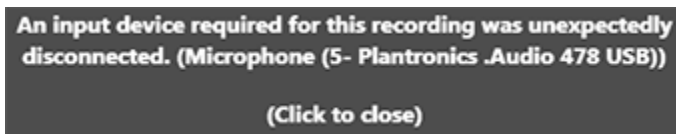
notification message will appear in the system tray:

The recording will be stopped, finalized and uploaded to the server automatically.

### Ad-Hoc Recording (Classroom or Personal Capture)

During an ad hoc recording, if a selected USB audio or video input device is unplugged from the machine a warning message will appear in the software. For example:

The recording will be stopped, finalized and uploaded to the server automatically.

User Logout or Graceful Restart/Shutdown

During either an ad-hoc or scheduled recording in Classroom or Personal Capture, if the user chooses to log out of their account, restart or power off the machine via the **Start** > **Shutdown** menu, the application will stop the current recording and delay the user-requested process in an attempt to finalize the capture media. The following message will appear in the presented list of applications that are still running on the system:
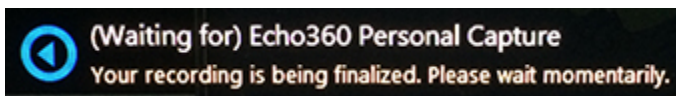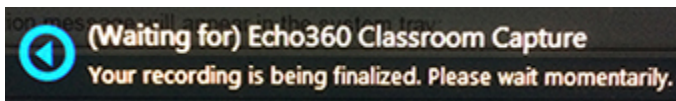
Scheduled Recording (Classroom Capture Only)

If the recording was scheduled, it will automatically resume if the user logs back in during the scheduled window. Once the recording has run the allotted time, all created media will be uploaded to the server. This will result in multiple final Echoes produced as a new set of capture media is created after a user logs back into the machine.

> ℹ️ **Instructor Switching**
> This feature helps to cover situations where an instructor logs into the machine after the start of a recording, either because the previous instructor's lecture ran late or because the new instructor arrived late.

Ad Hoc Recording Recording (Classroom or Personal Capture)

If a user chooses to log out of their account, restart or power off the machine via the **Start** > **Shutdown** menu during an ad hoc recording, they will be required to log back into the machine and start a new recording. Media recorded

prior to the log out/restart/shutdown will be stopped, finalized and uploaded to the server automatically.

Hard Shutdown or Loss of Power

In the event that the Classroom or Personal Capture software is recording and the machine loses power or has a system fault, media recorded prior to the failure will be finalized and uploaded to the server once a user is logged back into the system.

### Scheduled Recording (Classroom Capture Only)

If the recording was scheduled, it will automatically resume if the user logs back in during the scheduled window. This will result in multiple final Echoes produced as a new set of capture media is created after a user logs back into the machine.

Ad Hoc Recording (Classroom or Personal Capture)

If the recording was ad hoc, the user will be required to start a new one if they wish to continue recording.

Force-Closing Application

When performing an ad hoc recording via Classroom or Personal Capture, if a user chooses to close the application the following message will appear:
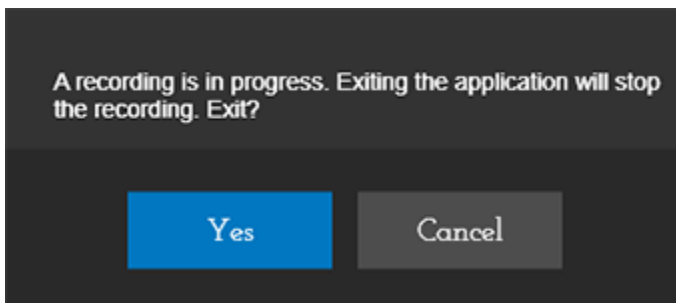

If the user then selects **Yes** to force-close the application, the recording will be stopped, finalized and uploaded to the server automatically.

Loss of Internet Connectivity

Ad Hoc Recording (Personal Capture Only)

When logged in to the Personal Capture application with an ESS user account, if network connectivity is lost and a user attempts to publish a recording the login window will re-appear with the following error:
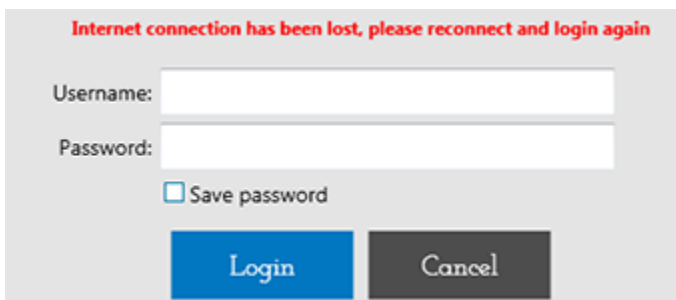
Check the network connection, then attempt to publish again.

Video Card and Driver not DirectDraw Compatible

When the Classroom or Personal Capture application is launched, automatic detection of the installed video card and it's driver take place to ensure support for DirectDraw. If the video card does not support DirectDraw, the preview window thumbnails will not appear and the software will not be able to record. In this case, the following message will appear:

Cannot initialize graphics. Please make sure your video card and driver are compatible with DirectDraw, and try again.

Ensure that the video card supports DirectDraw functionality and the latest drivers for the device are installed on the system, then try again.