

EMBEDDING QUICKTIME MOVIES

IN WINDOWS POWERPOINT

THE PROBLEM

Media Solutions has received numerous requests to embed QuickTime movies within PowerPoint presentations. On the Macintosh, this is a very simple matter of linking in a movie. On the Windows platform, any media form which is not native to the Windows operating system requires some additional configuration and programming.

This web page is designed to provide step-by-step instructions on how to embed Quicktime in the Windows version of PowerPoint. Included in these instructions is information about making a double-size proxy or reference movie so that presenters can display larger movies in large room viewing situations.

The final output of these instructions demands one of two scenarios:

1. The PowerPoint presentation itself and the QuickTime movies are all co-located on a CD-ROM that is created.
2. The PowerPoint presentation itself and the QuickTime movies are all co-located on the hard drive of the presenter's desktop or laptop computer.

It is difficult to store the QuickTime movies on a CD-ROM and the PowerPoint presentation on a separate computer hard drive. Unless the presentation will ONLY be played on one computer in which the Drive Letter Designation of the user's CD-ROM drive is known and consistent, it is NOT recommended to split the PowerPoint presentation from the location of the QuickTime movies.

It is assumed that the playback computer is of relatively recent vintage, such as the last three years. Older, slower computers will have difficulties displayed digital movies of any sort, particularly with movies compressed using contemporary codecs.

Follow the links below to proceed through the steps to embed QuickTime movies in a Windows PowerPoint presentation.

If you prefer to download an Adobe Acrobat PDF version of these instructions, follow this link:

 [Get the PDF version of this web page](#)

- ▶ Prepare the Quicktime Movies
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Prepare the QuickTime Movies

- A videotape of source materials will be supplied, whether VHS, SVHS, Beta, or Mini-DV. Any of these formats can be ingested/digitized on either the Final Cut Pro Edit System or the Premiere "Targa 2000 DTX" Edit System.
- We assume that a "high quality" version of the movie is desired for PowerPoint playback, which means a small frame size like 320x240.
- These instructions also assume that a "large/full frame" version of the movie is desired for playback in large room presentation settings.
 1. **INGESTION:** With DV ingestion, the video clip can be brought into the computer at full DV frame dimensions and 29.97 frames per second for editing. (Specific settings for ingestion are not included here.) With ANALOG tape ingestion on the Targa 2000 DTX system, the video clip should be brought in at 320x240, 29.97 frames per second, Targa Video 3:1 Compressor, automatic de-interlacing. (Specific settings for ingestion are not included here.)
 2. **CLIP CLEAN UP:** On the Final Cut Pro or Premiere project timeline, the IN and OUT points for the movie should be cleaned up. Any other odd events in the tape can also be "doctored" as seen fit. On the Premiere project timeline, similar clean up activities should take place.

NOTE: For digital movies that play via the web or CD-ROM, it is aesthetically best to have the movie start with an actual frame of video, not with a fade up from black. The same is true for the ending of the movie. To accomplish this may require additional editing on the project timelines in the non linear editing software.

3. **COMPRESS THE MOVIE FOR DISTRIBUTION:** From Final Cut Pro, you can save out the movie as a QuickTime movie, then bring that intermediate movie into the software program Cleaner Pro for compression. From Premiere, you can directly export the project timeline into Cleaner Pro for compression without having to save an intermediate movie.
 - In Cleaner Pro, there are various compression settings. The one for **QUICKTIME CD-ROM** using the Sorenson codec, 320x240, high quality is preferred.
 - A major adjustment to the setting for compression you will use is to adjust the IMAGE OUTPUT by pumping up the **Gamma to "30"** on the slider scale in Cleaner Pro. This will make sure the movie is not too dark when played on Windows computers.
 - The final output of the compression will be a 320x240 QuickTime movie using the Sorenson Codec. Use a file extension of: **.mov**
 - Sorenson is preferred because it does a beautiful job of compressing the movie and also accommodates scaling up the movie to larger viewing sizes for large room presentations.
 - As long as an end user has QuickTime 5 or greater on their computer, the Sorenson codec will always be installed and "good to go" for any Sorenson-compressed movies during playback.



Create QuickTime Reference Movies (proxies)

- This may seem odd, but the next step is to take your 320x240 Sorenson Codec movie and create what are called "**reference movies**." A reference movie is a small 60KByte QuickTime movie that actually contains no video, but instead just points to or refers to the "real movie."
- Why are the reference movies so important? Because PowerPoint completely chokes when you ask it to include a digital movie that is over a minute long. However, when you embed "reference movies" in PowerPoint, the software functions well. The "reference movies" are very small and do not overwhelm the RAM capabilities of the Windows computer.
- The "reference movies" simply call up the real movie for playback. The end user has no idea that you've pulled a "fast one" on the CPU and on PowerPoint.
- The tool you will use to make the reference movies is the QuickTime Player software. You should create the reference movies on a Windows computer using QuickTime for

Windows 5 or greater. Be sure the version of QuickTime you are using is the Professional version with a pro license number.

- Because "reference movies" and CD-ROMs are sensitive to the directory structure under which their files are created and related to one another, create the following folder on your Windows Computer:
 1. **CREATE A PROJECT FOLDER:** On your Windows computer, make a Project Folder and name it after the PowerPoint file you are working on. This same name will be used to label and name the CD-ROM that is created later.
 - If you can restrict your Project Folder/CD-ROM name to 8 characters, then most Windows computers will comply. If need be, you can exceed the 8 characters, but in certain "views" under the Windows operating system, characters after the first 8 are truncated.
 - Do not use a 3 character file extension in the name of your Project Folder.
 - Inside the Project Folder, copy the PowerPoint presentation.
 - Inside the Project Folder create a subfolder called: **movies** Copy your 320x240 Sorenson movies into this subfolder.
 2. **OPEN THE 320X240 SORENSON MOVIE IN QUICKTIME PLAYER:** Launch one of the 320x240 Sorenson movies in QuickTime Player Pro.
 3. **MAKE A "_SMALL.MOV" REFERENCE MOVIE:** Under QuickTime's FILE menu, select the option SAVE AS. This will allow you to make a reference movie.
 - In the resulting dialog box, make sure the radio button is selected for the option called "Save normally, allowing dependencies."
 - Rename the movie by adding something like: **_Small.mov** to the base name of the movie. For example, **ALFNEWS_Small.mov**.
 - Make sure to save the _Small reference movie to the subfolder called "movies" in which the original 320x240 Sorenson movie was copied.
 - The resulting _Small reference movie will autolaunch the video content of the real 320x240 Sorenson movie.
 4. **MAKE A "_LARGE.MOV" REFERENCE MOVIE:** Make sure your original 320x240 Sorenson Movie is the active movie in your QuickTime Player.
 - Under QuickTime's MOVIE menu, select the option DOUBLE SIZE. Your original movie will now appear twice as large during playback, but with more pixel artifacts. If this large movie is projected, people sitting in the audience may not see these artifacts. What a bonus.
 - Under QuickTime's FILE menu, select the option SAVE AS. This will allow you to make a reference movie for the Double Size movie.
 - In the resulting dialog box, make sure the radio button is selected for the option called "Save normally, allowing dependencies."
 - Rename the movie by adding something like: **_Large.mov** to the base name of the movie. For example, **ALFNEWS_Large.mov**.
 - Make sure to save the _Large movie to the subfolder called "movies" in which the original 320x240 Sorenson movie was copied.
 - The resulting reference movie will autolaunch the video content of the

320x240 Sorenson movie, but will automatically scale it up to **twice** the original size for large room playback.



Link the QuickTime Proxies into PowerPoint

- The next step is to make links in the PowerPoint presentation to the `_Small` and `_Large` reference movies. Follow these instruction precisely, or risk getting weird PowerPoint error messages. I won't include general instructions for working within PowerPoint here. Only the specifics for embedding the links are enumerated.
 1. In the edit mode for PowerPoint, go to the particular "slide" which needs a link to a QuickTime movie.
 2. We will create two links, one for the `_Small` movie and one for the `_Large`. The procedures are the same, so I will outline them only once below. If you are only interested in a `_Small` or a `_Large` movie, then link only the reference movie you need.
 3. **INSERT>OBJECT**: While on the appropriate "slide," go to PowerPoint's **INSERT** menu and select the option **OBJECT**.
 - In the resulting dialog window, select the radio button next to "Create from File." Ignore the options called Object Type.
 - Make sure you do NOT check the box called Display an Icon. I know, I know, they all seem tempting, but PowerPoint just kept choking on me when I tried other options.
 - Once you have selected "Create from File," the window changes and asks you to locate the reference movie you are creating as an OBJECT. Use the BROWSE button to locate either the `_Small.mov` or the `_Large.mov` reference movie. When the movie is located, select it and click OK.
 - You are returned to the original dialog window for INSERT OBJECT. The correct movie file is present in the FILE box. Click the OK button.
 - After a second or two, a very tiny icon that looks like a QuickTime logo appears center screen on your PowerPoint slide. It is labeled with the name of the movie file you are creating as an OBJECT.
 - Move the MOVIE OBJECT to any position on the slide.
 - Follow the same INSERT>OBJECT instructions to create an OBJECT for any other "reference movies" you have.
 4. **RESIZE YOUR MOVIE OBJECTS**: Recall that the new movie objects on your slide are pretty small. You can select that object and use a corner "anchor box" to

stretch the object to a larger size. Don't go overboard, because the QuickTime icon will get very chunky looking. I haven't yet figured out how to link a QuickTime movie to a really nice looking custom icon. Perhaps future versions of PowerPoint will have this functionality, even though the software appears to have this feature now. Unfortunately, the software keeps choking on me.

- Make sure the movie objects (and all the extra real estate surrounding each one) do NOT OVERLAP.
- 5. **ENGAGE THE LINKED OBJECTS WITH ACTION SETTINGS:** Next, you need to "program" each movie object to open the QuickTime Player and play the appropriate movie. The instructions are given once here, but you would do the same thing for both of your movie objects, `_Small.mov` and `_Large.mov`.
 - Select one of the movie objects so that its anchor boxes are present.
 - You have two ways to get to the ACTION SETTINGS dialogs. Either go to the SLIDE SHOW menu for PowerPoint and select ACTION SETTINGS, or Right-Mouse Click on the movie object and select ACTION SETTINGS (remember, we're on a PC, not a Mac. Macintoshes seamlessly embed QuickTime movies without having to use the INSERT OBJECT method).
 - In the ACTION SETTINGS dialog window, you will engage two settings:
 1. Select the radio button for "Object Action" and from the choices available, choose "Activate Contents."
 2. Select the check box "Highlight Click." This will give the end users visual feedback that they have clicked the movie object.
 - Click the OK button.
 - Your first movie object has been programmed. Do the same for any other movie objects.



Engage PowerPoint Transition or Animation Settings

- If you are using transitions or animation settings for the text, images and objects on your slides, you will need to program the Movie Objects to appear at the appropriate time with the appropriate transition. This doesn't affect the movie object links, but does impact the viewer's experience of the presentation. Consult the online HELP in PowerPoint for detailed instructions.



Save the PowerPoint Presentation

- As always, save your PowerPoint presentation.



Test all Movie Object Links for Playback

- Test all the Movie Object links by playing your PowerPoint presentation.
- Use the menu item **SLIDE SHOW>VIEW SHOW** or click the little "projection screen" icon in the lower left of your PowerPoint screen to move from EDIT to SHOW mode.
- Advance your PowerPoint presentation to the slide with the movie objects.
- Click one of the movie objects. It will launch QuickTime Player on top of the PowerPoint slide. The Movie (whether `_Small` or `_Large`) will appear in a QuickTime Player Window.
 - NOTE: In PowerPoint, launching an outside application will cause a warning dialog box to appear. It cautions you about macros and viruses. Simply click OK to this warning. Unfortunately, this warning will always appear each time you launch Quicktime from within PowerPoint. I have not found a way within PowerPoint to defeat this warning message.
 - Once your movie opens, moove it around the screen for best positioning.
 - Use the playback controls to pause, play or rewind your movie.
- To return to the PowerPoint presentation, just click anywhere outside the Quicktime Player window on the PowerPoint slide.
- Test other Movie Object links. If you didn't close your previous movie from the QuickTime application, it will still be open on the screen when the second movie launches.
- If the user's laptop or computer doesn't have the chutzpa to play back a Double-Size movie, the movie will sputter and stutter. That's OK. Just use the smaller movie for playback.



Burn a CD-ROM of the PowerPoint Presentation and the QuickTime Movies (optional)

- Contact Media Solutions in order to burn a CD-ROM with the PowerPoint presentation and the subfolder "movies."
- Thoroughly test the CD to make sure the reference movies can find the original 320x240 Sorenson movies and play the video content (either _Small or _Large).
 - If the PowerPoint presentation and subfolder "movies" are ever separated from each other, the links will break.
 - If a reference movie in the subfolder "movies" is separated from its original movie, the PowerPoint link will break.
- A CD-ROM is the most universal distribution medium we have right now for Windows-based computers. Floppy Disks do not have enough storage capacity to hold a digital movie, so they are not an option for delivering the finished product to the client. Zip cartridges are a viable option.

