Streaming Video Tutorial

(Using Microsoft Producer with PowerPoint)

Producer 2003 is designed to run with PowerPoint 2003 or Microsoft PowerPoint version 2002, available in Microsoft Office 2003 Editions or Office XP suites.

Streaming video is a technology used on the World Wide Web to expedite the video viewing process. It allows the end user to begin viewing the video as soon as a connection is made with the media server, instead of having to wait for the entire video file to download before viewing. This is accomplished by "streaming" the video file over the internet in small pieces. A media player on the user's computer deciphers those streaming pieces as they are downloaded and presents them seamlessly to the viewer. The end result is close to real-time viewing.

This tutorial is a step-by-step guide and will explain:

- How to install and run Microsoft Producer.
- How to plan and achieve a successful video shoot.
- How to synchronize video with the PowerPoint slides as the presentation occurs
- How to transfer video from a digital tape to your computer using Microsoft Producer.
- How to use Microsoft Producer to synchronize video presentations and their corresponding PowerPoint slides after the presentation has occurred.
- How to publish the Microsoft Producer project.
- How to stream the published video presentation over the internet.
- How to burn the published video presentation to CD-ROM or DVD.

Streaming video technology dramatically increases the accessibility of information presented at seminars, conferences, and workshops by making it available to a worldwide audience.

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Install and run Microsoft Producer

 Go to the Producer for Microsoft Office PowerPoint 2002/2003 download page.

Important: You must have an internet connection for the link above to work

2. Click the download button, and save the file to your computer (*figure 1*)



Figure 1: Click the download button.

- 3. Browse to the location where you saved the program, and then doubleclick the file named **msprod2.exe** to start the setup program. Follow the instructions on the screen to complete the installation.
- 4. After installation is complete, you can run Producer from the **Start** menu.

The Video Process

Planning a video shoot

- Get directions to the event location.
- Get an event agenda to help plan when to change video tapes. Most minidigital video tapes are 1 hour, but 2 hour tapes are available at a price.
- Make a request for the PowerPoint presentations before the event. If you
 have them in advance, synchronization is possible during the taping of the
 event (this decreases post-video production time).
- Double-check equipment before you depart.
 - Camera (and appropriate connection/power cables)
 - o Tripod
 - Blank tapes
 - Microphone (test battery)
 - Lighting (spare bulbs)
 - o Batteries (charged)
 - Extension cord and packaging tape (to keep cord from tripping someone)

Setting up equipment

- Arrive at the location early to assess the venue and pick a good camera location.
 - Optimal is at center and close to the podium with a clear line of sight to the speaker (take best location available).
 - Make sure the extension cord reaches.
 - Try not to obstruct audience view.
 - Allow enough space for all equipment, and room to work (changing tapes, recording times, centering camera, etc...).
- Set up the camera, connect power, attach microphone receiver, and test to make sure it all functions correctly.
- Assess the room's lighting, and make necessary adjustments.
 - Find venue light switches and leave on those that don't drown out the presentation screen.
 - o Open shades that don't drown out the presentation screen.
 - Set up auxiliary light, testing from the podium, and from the video camera. If the shadow from the auxiliary light is visible on the wall behind the speaker, than the light should be place directly behind the video camera (this keeps the shadow behind the speaker).
 - Set up back lighting if possible.

- Explain to the speakers why you are there, what the planned use of the video is, and that the video will turn out better if they don't move from the podium. Also explain to them how to use the microphone.
- Set up the main computer to keep track of slide times, or be ready to keep them manually.
 - Keep slide times using PowerPoint. To do this, have the person running the PowerPoint presentations for the event use the "Show Slides And Recording Timings" feature in the "View" drop down menu (*Microsoft Producer must also be installed for this feature*). This will set the slide times as the speaker advances slides during the presentation. At the end of the presentation, they will need to be saved and later imported into Microsoft Producer.
 - Download RTI PowerPoint® Timer 1.0 onto the main event computer (find the event equipment lead). This will keep track of the slide times, and save them to a .txt file with the same name as the PowerPoint presentation.
 - Print up a table with numbered cells to manually write down slide times. The video camera will have the amount of time elapsed on the tape. When the speaker advances to the next slide, look at the elapsed time and write that down in the cell that corresponds to the slide (see figure 2).

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01)	: 36	16) 15 :33	31) 29:31	46) :	61) :
02)	1:40	17) 16:02	32) 30:52	47) :	62) :
03)	2:37	18) 16:40	33) 3) : 34	(48) :	63) :
04)	3:29	19) 20:28	34) :	49) :	64) :
05)	4:48	20) 21 : 36	35) :	50) :	65) :
06)	6:04	21) 22 : 13	36) :	51) :	66) :
07)	6:23	22) 22:50	37) :	52) :	67) :
08)	7:16	23) 23:14	38) :	53) :	68) :
09)	7:47	24) 24:43	39) :	54) :	69) :
10)	8:42	25) 25:47	40) :	55) :	70) :
11)	9:35	26) 26:33	41) :	56) :	71) :
12)	12:02	27) 26:40	42) :	57) :	72) :
13)	12:29	28) 27 : 14	43) :	58) :	73) :
14)	13:48	29) 27 : 48	44) :	59) :	74) :
15)	14:30	30) 28 : 11	45) :	60) :	75) :

Figure 2: This table is for manually keeping track of slide times.

• For more information on video techniques, go to the UW Research Channel's "Video Production Guidelines for Streaming Media".

Important: You must have an internet connection for the link above to work.

Video the event

Follow along with the agenda, making changes where necessary. Keep track of how much time you have on your current tape, noting whether it will have to be changed after the presentation or not. Use time between speakers to organize your work space and change tapes if necessary. Taking manual note of slide times is good backup to possible problems with the RTI PowerPoint Timer 1.0 or the PowerPoint "Show Slides And Recording Timings" feature.

Get copies of the presentations

Get copies of all the PowerPoint presentations and, if you used the RTI PowerPoint® Timer 1.0 get the corresponding slide times files (the slide times are the .txt files of the same name as the .ppt files).

Synchronize Live Video Capture with PowerPoint Presentation (using Microsoft Producer)

Preparation

There is a lot that can be done before the event to make the live synchronization process smoother. Anything that can be done before the event should be done.

- You will need a laptop with Microsoft Producer on it. A FireWire is needed to connect the camera to the laptop (the longer the better).
- The PowerPoint presentations will also need to be on the laptop. Try to get them before the event, but if need be you can get them from the event equipment lead while you set up.
- Create a new Microsoft Publisher file for each PowerPoint from the event.
 Import the PowerPoint, put the slides on the timeline, and save it to the laptop (if time allows, fill in the presentation information under the "Table of Content" section in Producer).

The live synchronization process

The live synchronization process is most easily accomplished with two people. One person will run the camera while the other works on the laptop. The setup is the same as with just the camera, but twice as much room will be needed and some of that has to be table space for the laptop. The following steps occur after setup, during the event.

- 1. Open the Microsoft Producer file of the event speaker you are about to video.
- **2.** In the "Tools" dropdown menu, click "Capture", or click the "Capture" icon from the tool bar at the top of the page.

3. The "Capture Wizard" dialog box will appear. Select "Narrate slides with video and audio", then click "Next" (see *figure 3*). If the camera is not connected to the laptop you will not be able to select this option.



Figure 3: The "Capture Video, Audio, or Still Images" dialog box for the Microsoft Producer Capture Wizard.

4. Under "Target audience connection" and "Video display size", scroll to the selections that meet the required use of the video. After the selections are made, click "Next". In the image below, "Local playback or from a CD at 800 kbps" is selected for highest quality, and "Medium – 320 x 240" is selected for display size (see *figure 4*).

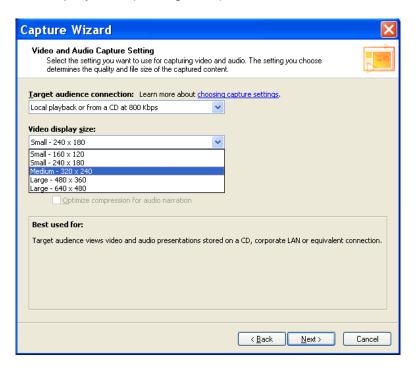


Figure 4: The "Video and Audio Capture Setting" dialog box for the Microsoft Producer Capture Wizard.

5. The next "Capture Wizard" box relates to the video camera type. "Capture Devices" will already be selected, if the camera is connected to the laptop. Click next.

6. When you begin to video the presentation, click the "Capture" button. Click "Next Slide >" whenever the presenter forwards to the next slide. Click the "Stop" button at the end of the presentation (The "Capture" button will change to the "Stop" button after it is clicked). See *figure 5*.

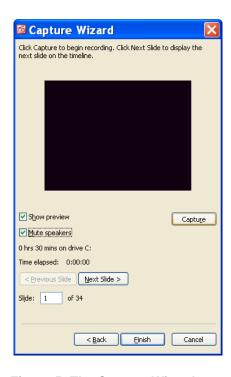


Figure 5: The Capture Wizard control panel for live synchronization.

7. Save the Microsoft Producer project (This can take a few minutes, depending on the speed of the computer and the settings selected to capture the video).

Capturing Video from the Camera (using Microsoft Producer)

System Requirements

Microsoft Producer requires the following minimum system requirements:

- Microsoft Windows® 2000 Professional with Service Pack 1 or higher, or Microsoft Windows XP Home Edition or Professional
- 400 megahertz (MHz) processor, such as Intel Pentium
- 128 megabytes (MB) of RAM
- 2 gigabytes (GB) of free hard disk space
- An audio capture device to capture audio
- A video (DV or analog) capture device to capture video
- Microsoft PowerPoint 2002 or 2003
- An Internet or network connection (to publish a presentation to a Web site, e-service provider, intranet site, or shared network location).

The following is recommended for capturing from a DV device:

• 600 MHz or higher Intel Pentium III processor or equivalent

The following software is required to playback a Microsoft Producer presentation:

- The Microsoft Windows 98 operating system (or higher), or the Microsoft Windows NT 4.0 operating system (or higher)
- Microsoft Windows Media Player 6.4 (or higher). Windows Media Player
 7.0 or higher is recommended to optimize presentation playback.
- Microsoft Internet Explorer 5.0 (or higher)

Capturing video from the camera

- 1. Rewind the Mini DV digital tape and connect the camcorder to the computer where the video file will be stored.
- 2. Open Microsoft Producer and when asked "How do you want to create your presentation" check the radio button for "Start a new blank project".
- **3.** In the "Tools" dropdown menu, or on the toolbar at the top of the program page, click "Capture" (see *figure 6*). This will start the Capture Wizard.



Figure 6: Click the "Capture" icon to capture video from the digital camera.

4. Capture Wizard; Capture Video, Audio, or Still Images: When asked to "Choose the type of content you want to capture", select the radio button for "Video with audio" (see *figure 7*). Then click the Next button.

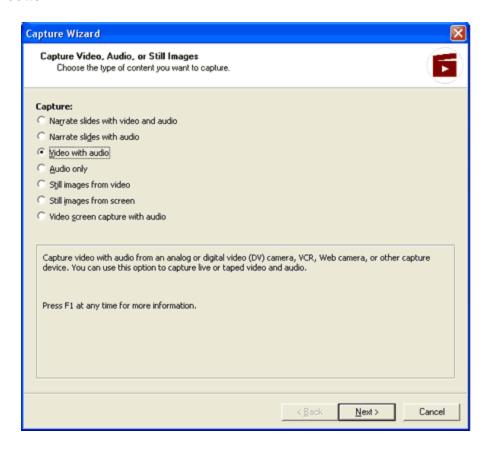


Figure 7: The "Capture Video, Audio, or Still Images" dialog box for the Microsoft Producer Capture Wizard.

5. Capture Wizard; Capture Video and Audio:

When asked to "Choose which video and audio capture setting you want for your recording", select the radio button for "More choices". And scroll to "Medium video display (320x240) for local playback" (see *figure 8*). Click the Next button.

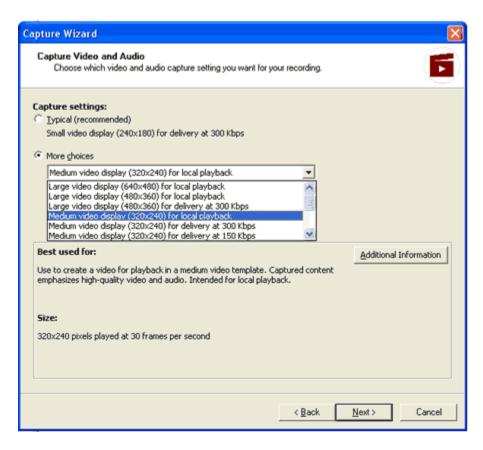


Figure 8: The "Capture Video and Audio" dialog box for the Microsoft Producer Capture Wizard.

*This is what RTI has used in its streaming videos. There are many other settings to meet specific end products and end users. You will be able to make the video smaller in size and detail later on during production, but will not be able to make it bigger. However, if you find later that you captured at to low a setting, then you will have to recapture at a higher setting. Use the "Best used for" information box and the "Additional Information" button for more details on Capture settings.

6. Capture Wizard; Choose Capture Devices:

When asked to "Choose the capture device you want to use for recording" chose the "Sony DV Device" for Video device and Audio device (see *figure 9*). Then click the Next button.

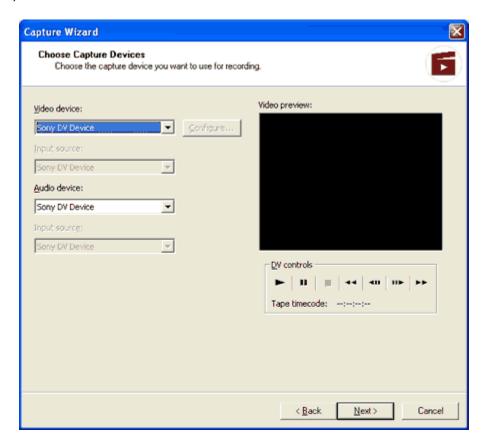


Figure 9: The "Choose Capture Devices" dialog box for the Microsoft Producer Capture Wizard.

*This is the RTI camcorder that will play the tape while Microsoft Producer captures it to a video file on the computer. When the camcorder is connected to the computer, these two options are already automatically selected.

7. Capture Wizard; Capture Video and Audio:

When prompted "Press Capture to begin capturing, and press Stop when you are finished capturing", use the "DV controls" to cue up the tape, set the "Options" to you preference, and then click the "Capture" button. Click "Stop" when finished capturing. If no "Capture time limit" is set and "Stop" is never clicked, it will capture from the tape until there is nothing else recorded on it. It will stop capturing automatically at the end of the recording.

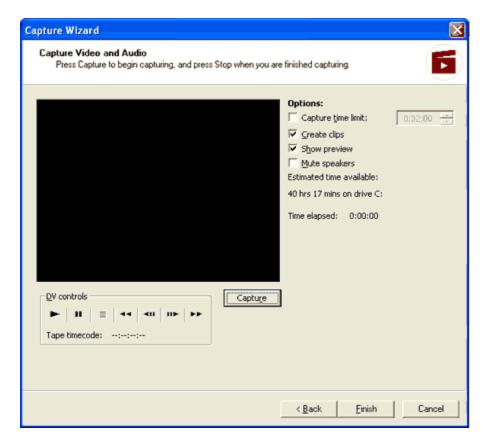


Figure 10: The "Capture Video and Audio" dialog box for the Microsoft Producer Capture Wizard.

*Be sure to close all other programs during capture. It is a very sensitive procedure that can be negatively affected by open programs on your computer. Close your email, Windows Messenger, and if you have an image on your desktop, change it to a blank screen.

- **8.** When you are finished capturing, a "Save Windows Media File" dialog box pops up. Brows to the folder where the .wmv file will be saved, name the file, and click "Save".
- **9.** On the Capture Wizard click "Finish". The .wmv file is saved to your computer, and imported into the blank Microsoft Producer project.

The Production Process (using Microsoft Producer)

There is no "One way" to produce a synchronized streaming video. This section is meant to give a general understanding of how to work within the Microsoft Producer interface. More detailed information is located in the Microsoft Producer for PowerPoint help pages (*figure 11*). Refer to the help page while learning the process of producing and publishing a presentation in Microsoft Producer.

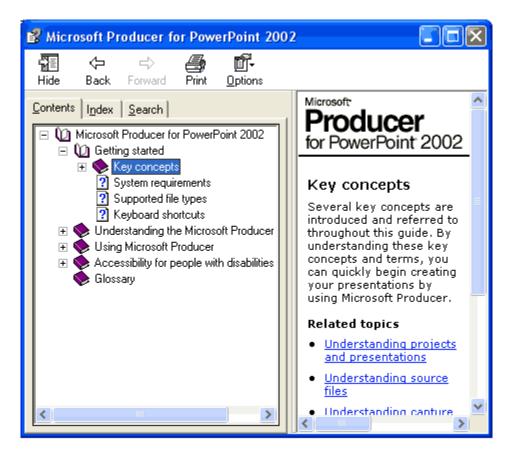


Figure 11: The Microsoft Producer for PowerPoint 2002 help menu.

Importing media into your Microsoft Producer Project

Microsoft Producer makes it possible to use a number of different media in the same project. You will need to import media from your computer into the project.

Helpful hint: Consolidate the media files you will use in the project to a common folder on your computer. This organizational step will facilitate the media import process.

Import media from your computer into your Microsoft Producer project.

- **1.** Open Microsoft Producer. When prompted either open a blank project, or open your existing project.
- **2.** Select the "Media" tab located toward the upper left of the Microsoft Producer project window (*figure 12*).



Figure 12: The "Media" tab is selected.

3. In the "Project Files" section, click on the folder of the media you want to import. This will bring up the import media icon (*figure 13* shows the "Import Video" icon).

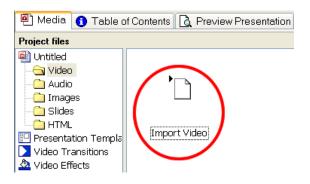


Figure 13: The "Import Video" icon is visible.

- **4.** Double click the "Import Video" icon, and browse to the folder on your computer that contains the video file to be imported into the project. Select that file and then click "Open". This will import that file into your project.
- **5.** Repeat these steps to import more video files, audio files, images, slides (i.e. an entire PowerPoint presentation), and HTML files.

Move the media files to the timeline to be edited as desired.

- 1. In the "Project Files" section of the project window, select the media folder that contains the file you want to move to the timeline.
- 2. Select the media file and drag it to the timeline by holding down the left mouse button and moving the cursor to the timeline. Release the left mouse button on the timeline and the file will be dropped.
- **3.** Repeat these steps to drag other video files, audio files, images, slides, HTML files, presentation templates, video transitions, and video effects to the timeline.

Edit the media on the timeline: To edit, click the media on the timeline that you wish to alter and then click the "Tools" drop down menu. There are many different video effects and transitions that you can add to or remove from your project using these tools. For more detailed information, click the "Help" dropdown menu and select "Microsoft Producer Help" or press "F1".

Change the timeline scale: Click the "Zoom Timeline In" icon ((4)) to increase the timeline scale; click the "Zoom Timeline Out" icon ((4)) to decrease the timeline scale.

View the media and their effects in the preview monitor: In the "Media" tab, you can preview files that you have imported or captured that appear in the contents pane. You can also preview the contents of the entire timeline. Click on a file and it will appear in the preview monitor. For video and audio files, use the controls to move to different parts of the file. Position the starting point of a preview by clicking on the timeline. The selected file on the timeline will be highlighted.

Adding information to the Table of Contents

The "Table of contents" tab lets you directly edit and change the entries into the table of contents and the Introduction Page.

1. Select the "Table of contents" tab located toward the upper left of the Microsoft Producer project window (*figure 14*).



Figure 14: The "Table of Contents" tab is selected.

2. In the "Table of contents" section (left), you can add, change, or delete table of contents entries from the presentation (there must be slides on the timeline for these options to be available). Double click the entry and make changes in the "Table of Contents Entry" dialog box (*figure 15*). Then click OK.

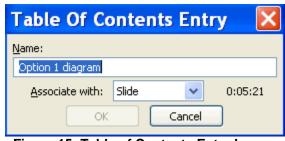


Figure 15: Table of Contents Entry box.

- **3.** In the "Introduction page" section (right), you can enter information about your presentation and specify an image for the introduction page of your presentation.
 - a. To make or change introduction page information, click in the text box and type in the changes.
 - b. To enter an image, click the "Browse" button for the introduction page image, and browse to the desired image on your computer.

Preview the Presentation

Select the "Preview Presentation" tab (*figure 16*), and use the preview controls or the table of contents entries to navigate through the presentation. Most edits can still be made on the timeline.

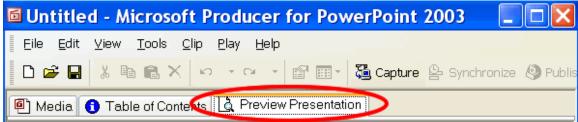


Figure 16: The "Preview Presentation" tab is selected.

The Publication Process (using Microsoft Producer)

Publishing the Microsoft Producer project

After the project has been edited, and the preview is as desired, it's time to publish the project.

1. On the toolbar at the top of the program page, click the "Publish" button.



Figure 17: Click the "Publish" icon to publish a Microsoft Producer project.

2. Publish Wizard: Select a Playback Site.

When prompted to "Choose how your presentation will be played back", select "My Computer", then click the Next button. (The files can be moved to "My Network Places", or to a "Web server" after the project has been produced.)

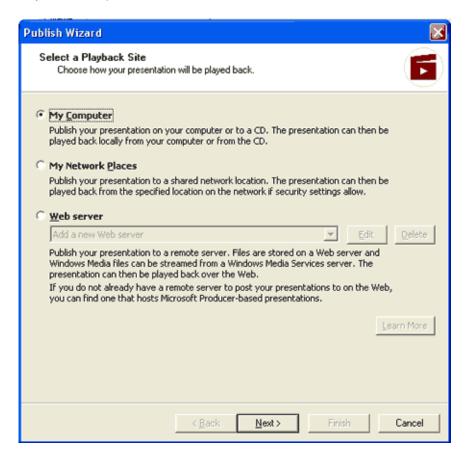


Figure 18: The "Select a Playback Site" dialog box for the Microsoft Producer Publish Wizard.

3. Publish Wizard: Publishing Destination.

When asked to "Enter the file name for your presentation and specify where your presentation files will be stored", do just that. Enter the file name and browse to the folder that you will put the presentation files in. Then click the Next button.

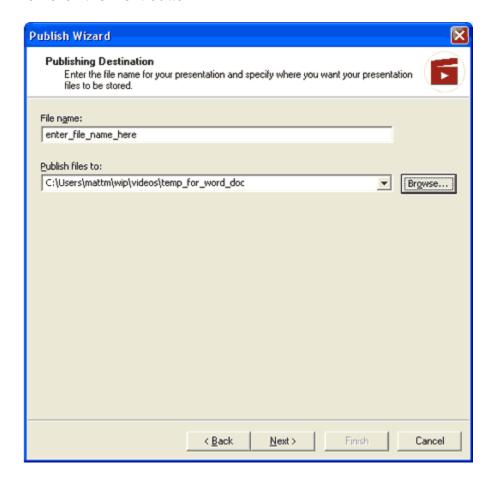


Figure 19: The "Publishing Destination" dialog box for the Microsoft Producer Publish Wizard.

4. Publish Wizard: Presentation Information.

When asked to enter the Presentation Information, fill in the text boxes as appropriate. Then click the Next button.

5. Publish Wizard: Playback Quality.

There are many possible options when prompted to "Choose a playback quality profile that best matches the connection speed of your intended audience" (see *figure 20*).

- If the streaming video is only going to be played on a local computer or from a CD (not over the internet), then select the top option "For local playback at 800 kbps".
- If the streaming video is only going to be played by users with high speed internet connections, then select the middle option "For target audience playback at 150 kbps".
- If the streaming video is only going to be played by users with dial-up modems, then select the bottom option "For target audience playback at 33.6 kbps".

*Multiple profiles can be selected for streaming video that will be accessed by multiple users with different connection speeds.

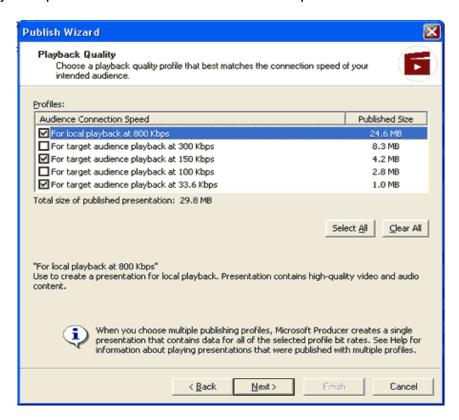


Figure 20: The "Playback Quality" dialog box for the Microsoft Producer Publish Wizard.

- * Be sure to close all other programs during publishing. It is a very sensitive procedure that can be negatively affected by open programs on your computer. Close your email, Windows Messenger, and if you have an image on your desktop, change it to a blank screen.
 - **6.** Click the Next button to begin publishing your presentation.

Streaming the video presentation over the internet

Moving streaming video files to a media and a web server

After the project as been produced, the files need to be connected to a server to be made available over the internet. For best results, the video files (.wmv) should be located on a Microsoft Media Server. The video will also function from a web server, but not as effectively as over the streaming media server. For server comparison information, go to:

http://www.microsoft.com/windows/windowsmedia/compare/webservvstreamserv .aspx

Move the .wmv file(s) to the Microsoft Media Server while keeping the rest of the files produced from the project on a web server.

- Open the new files folder that was created by Producer during publication of the project. It will be named the same as your Producer Project.
- 2. Move the .wmv file(s) to your media server. The file(s) will be labeled 0MM0.wmv, 1MM0.wmv, 2MM0.wmv, etc... To move the .wmv file(s), cut it from your local drive and paste it to the media server.
- **3.** Change the name of the .wmv file(s) if desired.

Change the .asx file(s) to show that the .wmv file(s) has been moved to the media server.

- 1. Open the new files folder that was created by Producer during publication of the project. It will be named the same as your Producer Project.
- 2. Open the .asx file(s) that is related to the .wmv file(s) that was moved to the media server. The .asx file "0Media.asx" relates to the .wmv file "0MM0.wmv", 1Media.asx" relates to "1MM0.wmv", "2Media.asx" relates to "2MM0.wmv", and so on. Open the .asx file(s) with Notepad or WordPad, and make the changes. Be sure to save the changes (see figures 21 and 22).

3. Change <REF HREF = "filename.wmv"/> to <REF HREF = "mms://sde.gis.washington.edu/filename.wmv"/>.

For example,

Figure 21: Changing .asx file in Notepad.

The code that is underlined in RED will be changed from

```
<REF HREF = "0MM0.wmv"/>
to
<REF HREF = "mms://sde.gis.washington.edu/0MM0.wmv"/>.
```

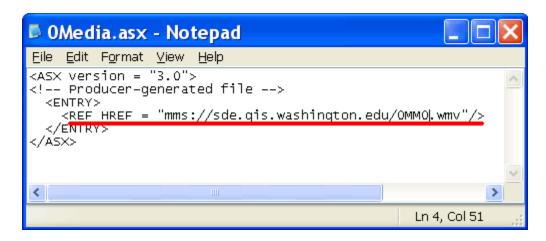


Figure 22: Changing .asx file in Notepad.

This will tell the user's web browser where to find the video file that goes with the rest of the Microsoft Producer project files.

4. Close the asx file; when asked of you want to save changes, click "Yes".

Move files from your local computer to a web server.

- 1. Copy the entire folder that was created by Producer from your local computer. It will have the same name as the Producer Project with "_files" after it. So a Producer Project called "Opening_Speaker" would publish files to a folder labeled "Opening_Speaker_files".
- 2. Paste this folder to the desired location on your Web Server.

From your web page, you will have to link to the Default.htm file found in the folder created by Producer during publication (selected in *figure 23*).

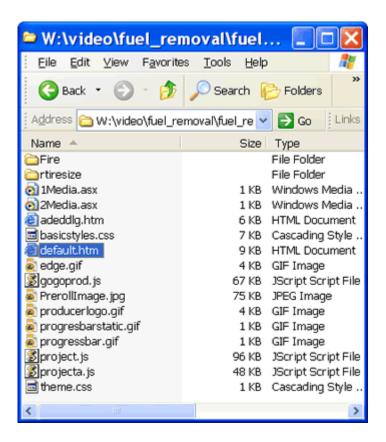


Figure 23: A link connected from a website to the "default.htm" file is made to stream the video presentation over the internet.

Burn the Streaming Video Presentation to a CD-ROM or DVD

A CD-ROM or DVD is an excellent way to distribute the synchronized presentation to individuals at the highest possible playback speed (Local Playback or CD run at 800 kbps).

1. Get BrowserCall: Before you copy files to a CD/DVD burning program, click on the following link and save "browsercall.exe" to the list of files that were produced when you published the Microsoft Producer project. BrowserCall is a freeware tool that will automatically open the user's default browser when the CD/DVD is played on the user's computer.

http://www.ashzfall.com/products/autorun/browsercall.html

2. Extract the "browsercall.exe" file: Open "browsercall.zip" and read the .txt files. Then copy the "browsercall.exe" file and paste it with the rest of the files that were produced when you published the Microsoft Producer project. It has to be in the same folder as "autorun.inf". Delete the "browsercall.zip" file while keeping the "browsercall.exe" file (remaining files should be similar to figure 24).

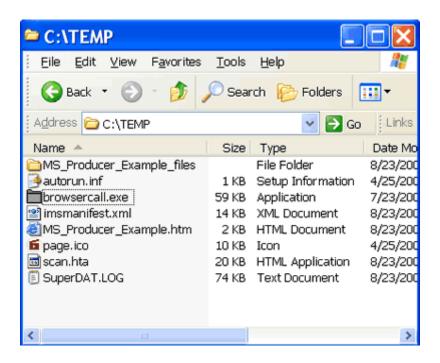


Figure 24: Browswercall.exe with the files published from a Microsoft Producer project.

- 3. Change "autorun.inf" so that it will run "browsercall.exe":
 - **a.** Open "autorun.inf" with Notepad (*figure 25*).

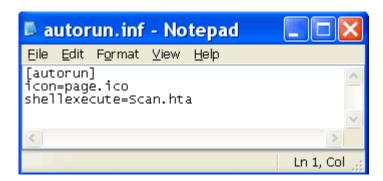


Figure 25: "autorun.inf" as seen in Notepad *BEFORE* any changes were made.

- **b.** Delete the line "shellexecute=scan.hta"
- **c.** Under "[autorun]", add the line that will direct "autorun.inf" to the html file that will automatically open in the user's browser window. For example:

"open=browsercall.exe \MS_Producer_Example.htm" (figure 21). Do not use "quotation marks."

d. If you have an icon that you want to use on the CD/DVD instead of the Microsoft Producer icon (page.ico), than add it to the list of files and delete "page.ico".

Be sure to change the line in "autorun.inf" from

```
"icon=page.ico"
to
"icon=name of icon.ico"
```

 e. Under "icon=page.ico", add the project label line label=Enter Label Name (The label in the figure 26 example is "MS Producer Example").

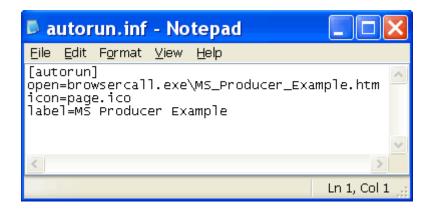


Figure 26: "autorun.inf" as seen in Notepad *AFTER* changes were made.

- 4. Now that the changes have been made, copy these files and paste them into a CD/DVD burning program that is connected to your CD/DVD burner. Be sure to include the folder that was created when you published the Microsoft Producer project. (In *figure 24*, the folder is named "MS_Producer_Example_files").
- After the CD/DVD is burned, eject it and put it into a computer's CD drive. It should automatically open the synchronized video presentation on that computer.