19

MULTI-MEDIA

With the PastPerfect Multi-media Upgrade, you will be able to attach digital images and link multi-media files to your catalog records. This is an optional feature and may be purchased for an additional charge. Multi-media files can include digital audio, digital video, web pages, MS-Word documents, MS-Excel files, or PDF files. Images may also be attached to exhibits, archaeological sites, and contacts. Multi-media files may be linked to the catalog and accession records.

In this chapter we will discuss how to install the Multi-media upgrade, how to attach and manipulate digital images, and how to link multi-media files.

## INSTALLING THE MULTI-MEDIA UPGRADE

When you purchase the Multi-media option, you will receive a Multi-media Upgrade Disk. To activate this feature, press **Setup** on the main menu and then select **Multi-media** on the Setup fly-up menu. Then press the **Install Multi-media Upgrade** command button and follow the instructions on the screen to complete the installation.

All PastPerfect digital images are stored in a folder on the hard drive. Multi-media files are also be stored in a separate folder on the hard drive. In a non-network installation these folders are generally c:\pp4\images and c:\pp4\multimedia. If PastPerfect is installed on a network, these folders will reside on the server. *See Chapter 1, Installation & Upgrade*, for more information.

Sub-folders are created within the digital image folder to store the images. By limiting the number of images in each sub-folder, the display time for the images is decreased. If you use the default setting for imaging sub-folders, which is **Autose-**

lect, when the number of images in the current image sub-folder reaches the maximum images per sub-folder, PastPerfect will create a new sub-folder.

Figure 19-1
Setup Multi-
media
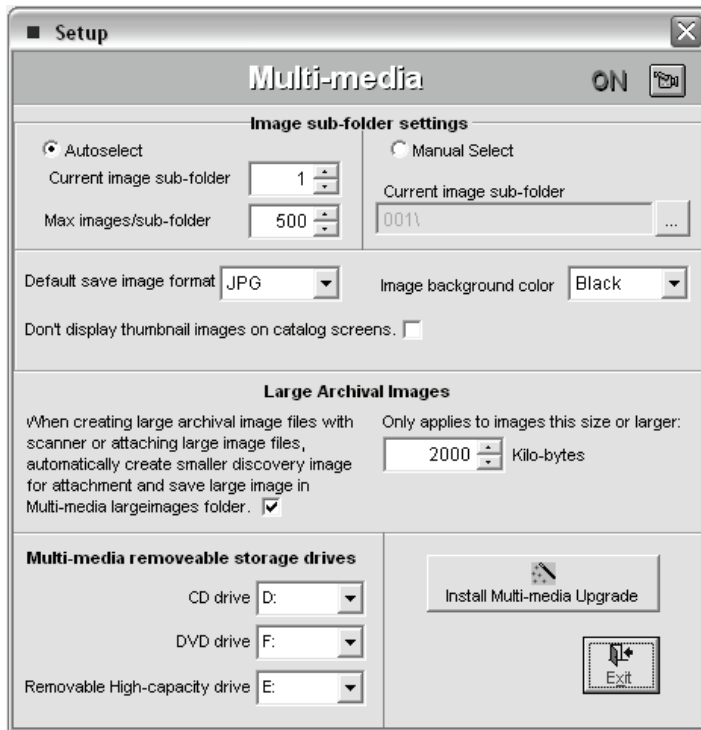
In the **Autoselect** mode, image folders must be named 001, 002, etc. It is possible, but not recommended, to give your image sub-folders names rather than numbers. To do this select the Manual setting for your images sub-folders.

Maximum Images/Sub-folder - when the number of images in the current image sub-folder reaches the maximum images per sub-folder, PastPerfect will start saving images in the next sub-folder. If you are using the Autoselect mode, new sub-folders will be automatically created as required. It is recommended that this setting be between 500 and 1000.

Default save image format - when creating images in PastPerfect via a scanner, this determines the image file type that will be created.

Image background color - select one of four colors for the thumbnail image background on the catalog pages.

Don't display thumbnail images on catalog screens - generally you do not want to select this option, but it may speed the opening of catalog records if your computer does not meet the minimum hardware requirements.

Large Archival Images - the images that you attach to PastPerfect records are generally for identification purposes. To conserve storage space and improve performance, these "Discovery" images should be of limited size and resolution. For preservation and high-quality printing, you may also want to create larger, high-resolution "Archival" images of your catalog records. PastPerfect can help you do this.

If you check the box in this area of the setup screen, when you scan an image at a high resolution or attach a high-resolution Archival image, a smaller Discovery image will be created. This Discovery image will be attached to the PastPerfect catalog record and a link will be created to the Archival image.

PastPerfect will decide if an image should be considered an Archival image based on its file size. Next to the check box you should enter this file size in kilobytes.

Multi-media Removable storage drives - since multi-media audio and video files can be large, you may not want to store all of them on your computer or file server's hard drive. Specify the drives on each workstation that will accept CDs, DVD, or other high-capacity media storage.

ATTACHING DIGITAL IMAGES

PastPerfect provides an easy-to-use interface that will allow you to acquire images directly from a digital scanner, camera, or any other TWAIN-compliant device. Once attached, images can be manipulated in a number of ways.

To attach or view images press the **Image Management** command button in the upper right-hand corner of the Archives, Objects, Photos, or Library catalog screen. The Image Management screen shown in Figure 19-2 will display.

Each catalog record can have one or more images attached. The maximum number of images that you can attach to a single catalog record is 999.

On the right side of the image management screen is the image management toolbar.

Figure 19-2
Image
Management
screen
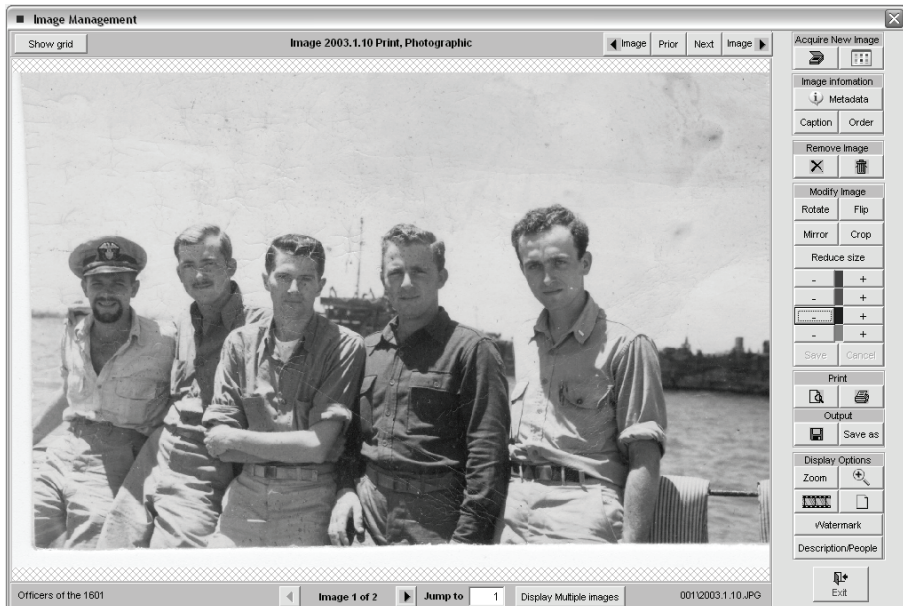
ACQUIRE IMAGE FROM SCANNER OR CAMERA

To acquire an image from your scanner, digital camera, or other TWAIN-compatible device connected to your computer, click on the Scanner icon at the top of the toolbar. If you have multiple devices connected to your computer, you may need to press the **Select Scanner/Camera** command button to choose the device you want to use. Next, press the **Operate Scanner/Camera** command button.

Figure 19-3
Scanning an
image

Click here to operate your
scanner or digital camera
to acquire images for this
record.
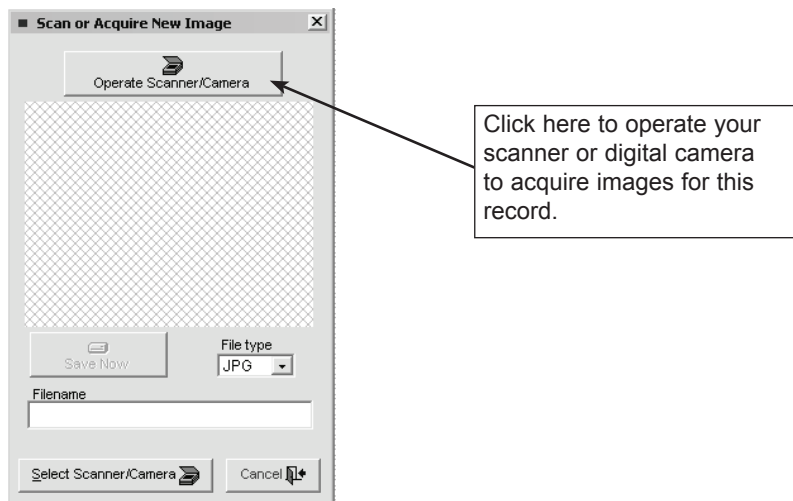
The software that comes with your scanner provides the next screen, which displays a variety of options for scanning the image, including dpi resolution. The higher the resolution, the better the image, but the more memory required to acquire and display the image and the more hard disk space required to store it. For most applications, you will want to use a resolution below 200 dpi. Images scanned at 100–200 dpi are quite adequate for use with PastPerfect. A good rule of thumb is to set the dpi so that the resulting image file size is about 500,000 bytes for uncompressed TIF or BMP images or 100,000 bytes for JPG images.

Once the image is scanned you will be returned to the Scan or Acquire Image screen where the image is displayed in thumbnail form. Be sure to complete the final step by selecting the desired image format and pressing the **Save Now** command button.

Figure 19-4
Scanned
image

PastPerfect will automatically assign an image file based on the object ID number.
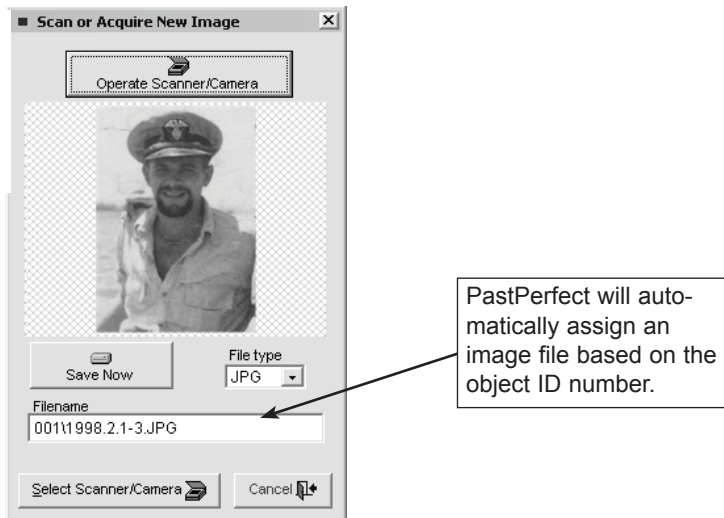
The default format for saving images is selected on the Multi-media Setup screen. As you save each image, you can use the default setting or make a change under File Type. The image formats available are JPG, TIF, BMP, or PNG. JPG makes effective use of compression to store color or grayscale images. The advantage of compressed images is that they require only about one-third to one-twenty-fifth the disk space.

After you have saved the image, the Image Information screen appears as shown in Figure 19-5. Here you can enter a caption for the image and metadata about the image file. Press **OK** to complete the process.

Figure 19-5
Image
Information
screen

Image Metadata

Enter a caption for this image: Display order

Captain Bill Crain   2

Original object size	11 cm x 6 cm
Original object format (type of print of negative)	Print-Photographic
Negative number	0001
Equipment used to acquire	hp Scanjet 3570c
Software used to acquire	MS Image Composer
Settings and Resolution	300dpi
Grayscale or RGB (color)	Grayscale
Created by	Tanaka, Jeanie
Date created	05/27/2004

Location of high-resolution archival image

High-resolution image file name (including path)

Copyrights

PastPerfect Museum

Uncompressed file size:	57,600	bytes
Acutal Image file size:	25,200	bytes
Height:	120	pixels
Width:	160	pixels

Format:	PNG
Bits/Pixel:	24 bit color image

Image file name: c:\pps40\images\001\2003.1.10-2.PNG

(i) View EXIF Information   ☑ Fill new entries from last

☐ Restricted   OK

ATTACH EXISTING IMAGE FILE

You may want to attach digital images that have been created outside of
PastPerfect. PastPerfect supports the attachment of these image formats: BMP,
JPG, PCX, PNG, and TIF. You cannot attach Progressive JPG images. To start
press the Attach New Image icon on the top of the Image Management toolbar.

Press this icon to locate an existing image file on your hard drive, net-
work, or removable drive. Then double-click on the file name.

You will then be presented with the Image Information (Metadata) screen shown
above. Enter a caption and other metadata about the image and press OK to
complete the attachment.

IMAGE MANIPULATION

Once attached, a variety of image manipulation tools are provided on the Image Management Toolbar. This toolbar, shown below, is located on the right side of the Image Management screen. Here is a description of each tool.

Figure 19-6
Image
Manage-
ment Tool-
bar

**Scan Image** - this tool was described on page 318.

Attach Image - this tool was described on page 320

Metadata - displays information about the digital image, including file name, size, format, original object size, original object format, equipment used to acquire, resolution used to acquire, created by, date created, location of high-resolution archival image, and copyright information.

Caption - use this tool to add or change the image caption.
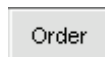
Order - if multiple images are attached to one catalog record use this tool to change the order of display.

Un-Attach Image - This tool will break the attachment between a catalog record and an image file. Using the Un-Attach Image button does not delete the image file.

Delete Image - This tool erases an image file and deletes it from the system. Unused and unattached image files should be deleted to conserve disk space.
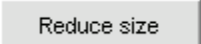
Rotate - rotates the image 90 degrees.

Flip - this flips the image top to bottom.

Mirror - this reverses the image left to right.

Crop - this opens the crop menu which can be used to crop a select number of pixels from the edge or the image, or the mouse can be used to select the crop area to retain.

**Reduce size** - use this tool to make the image smaller.

Red hue - use this tool to increase or decrease the red hue of the image.

Green hue - use this tool to increase or decrease the green hue of the image.

Blue hue - use this tool to increase or decrease the blue hue of the image.

Darkness - use this tool to lighten or darken the image.

Save - Once changes have been made with other tools be sure to press save to make them permanent.

Cancel - Press this command to undo any changes made to the image. This only works if you have not pressed Save.

Preview - Previews the print of the image.

Print - Prints the image.

Save to Floppy - This tool allows you to save the image file onto a removable medium.

Save As - Use this tool to change the image file name or image type. Image types can be JPG, BMP, TIF, PNG, or PCX. You can also use this tool to create a copy of the image.

Zoom - Use this tool to open a small zoom window at the upper right corner of the screen. Use the mouse in the zoom window to pan the

image. In zoom mode, vertical and horizontal scroll bars are enabled. To exit zoom mode and return the image to fit the screen press Zoom again.

**Magnifying Glass** - this will display a magnifying glass on the image that you can move with the mouse to enlarge selected portions of the image. To turn off the magnifying glass, drag it off the screen. To change the magnifying power, right-click on this tool. Note that depending on your computers RAM memory, high-power settings may require that the glass be moved slowly.

Slide Show - this tool starts a slide-show-type display of images. The display interval can be adjusted from one to twenty seconds. This feature can be particularly useful for automatically displaying all images in a catalog or images of records selected with a research query.

Optimize for Document Display - This tool will display images of documents in the optimum size for viewing.

Watermark - allows you to apply a text watermark to the image. This is described in more detail below.

Description/People - displays the description and people fields from the catalog record.

There are five additional command buttons at the top of the image management screen. They are:

Show grid - This command superimposes a grid over the image. The grid ruler lines are in pixels. This can be useful when resizing images

Prior/Next - These command buttons display the next or previous catalog records. Use the **<Image** and **Image>** commands to display the previous or next catalog record that has an image.

APPLYING A WATERMARK

To insure the security of your images, you may add your own custom watermark text. Once applied this mark cannot be removed from the image. To start the process, press Watermark on the Image Management toolbar. The following

screen will appear.

Figure 19-7
Apply
Watermark

Property of PastPerfect Museum

Watermark

■ Watermark

WARNING!
Once the watermark is
applied and saved, it can
never be removed from
the image.

Press Apply Watermark to add
a watermark to this image.

After it is applied, press Exit
and then Save on the image
toolbar to make the mark
permanent.

Apply Watermark

Location of watermark
Top

Setup Watermark

Cancel   Exit

■ **Watermark Setup**

Custom location coordinates

Text shade   Visibility %   x1   y1   x2   y2
Grey   4   Bold □ Italic ☑ 0   0   0   0

Text of Watermark
Property of PastPerfect Museum

Remove spaces before and after text ☑
(Usually results in larger watermark.)   Exit

Click here to apply
watermark.

Click here to open Water-
mark Setup screen.

Watermark Setup screen.

You can set the location of the watermark and define the watermark text. Press
Setup Watermark to enter or change the text, change the text style to bold or
italic, define a custom location, or to set the text visibility.

Press **Apply Watermark** to place the text on the image. You can press Apply
Watermark repeatedly to increase the intensity. Finally press **Save** on the image
management toolbar. Before pressing **Save,** the watermark can be removed with
the **Cancel** command button. *Remember, after pressing Save, the watermark
becomes permanent and cannot be removed.*

MULTIPLE IMAGING FEATURES

PastPerfect allows you to attach up to 999 images to each catalog record. These
may be displayed nine at a time in thumbnail version on the image management
screen. Multiple images can be very useful in providing a variety of views of the
same object.

Figure 19-8
Multiple
Images

To display all attached images nine at a time, click on the **Click to Display Mul-tiple Images** command button at the bottom of the screen. The screen will change to display nine images in thumbnail size.

In the Archives Catalog, you can scan an entire multi-page document into PastPerfect. Using the small prior and next arrows below the image screen can give you a sense of turning the pages of the actual document.

If you are attaching more than one scanned image to a catalog record, PastPerfect will automatically assign file names to the images as they are scanned. For exam-ple, the second item scanned for this record would be named 001/200322-2.jpg.

MULTI-MEDIA LINKS

A picture is worth a thousand words, but a video clip with audio is priceless. The Multi-media Upgrade allows you to enrich your collection with the power of video, audio, MS-Word documents, Excel spreadsheets, PDF files and HTML web pages. The easy to use Wizard allows you to find and attach multi-media links directly from the catalog or accession record.

To link Word documents and Excel files, your computer must have MS-Word and MS-Excel installed. These programs may be purchased separately from Microsoft. The software required for linking to audio, video, PDF and HTML files is either included with Windows or available as a free download from the web.

When an established link is selected the linked file or document will be opened with the software designated in your Windows setup to run that file. Therefore, different computers may display and run files differently.

PastPerfect multi-media linking is not limited to the file types listed above. In-fact you can setup a link to any file that can be opened with your computer's existing software. Therefore if you are using WordPerfect instead of MS-Word that will work just fine. You could even setup a link to a PowerPoint presentation or a custom application file specific to your organization.
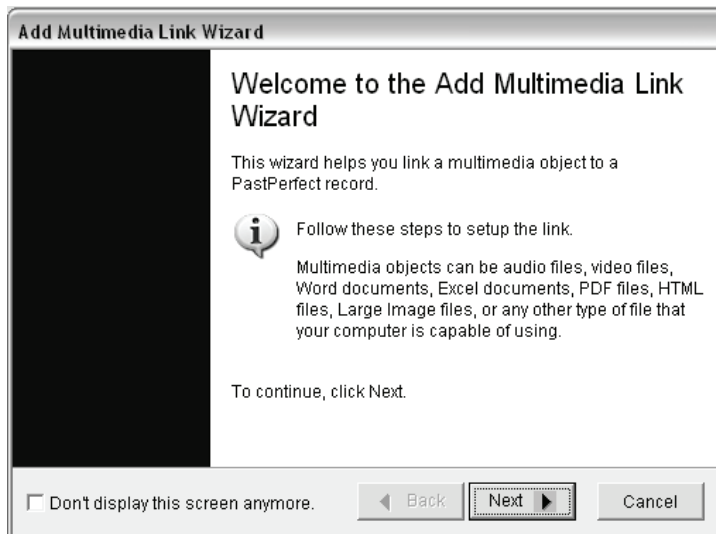
MAKING THE LINK

To create a multi-media link from a catalog or accession record, click on the **Setup Multi-media links** command button in the upper right-hand area of the record's screen.

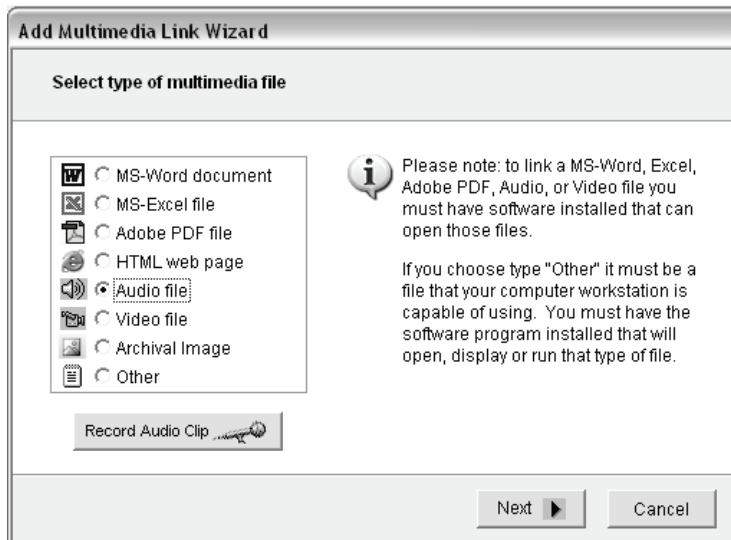Figure 19-9
Setup Multi-
media links
command

Click here to start the Add Multi-media Link Wizard
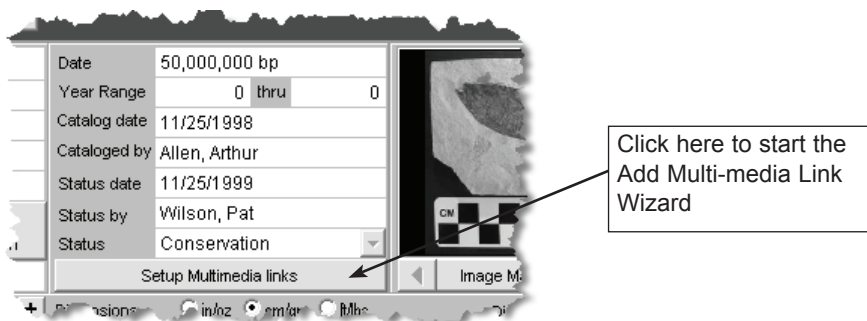
This will open the Add Multi-media Link Wizard as shown below. Press Next to start the Wizard.

Figure 19-10
Add Multi-
media Links
Wizard

Add Multimedia Link Wizard

Welcome to the Add Multimedia Link Wizard

This wizard helps you link a multimedia object to a PastPerfect record.

Follow these steps to setup the link.

Multimedia objects can be audio files, video files, Word documents, Excel documents, PDF files, HTML files, Large Image files, or any other type of file that your computer is capable of using.

To continue, click Next.

☐ Don't display this screen anymore.   ◄ Back   Next ►   Cancel

On the next Wizard screen select the file type of the media file you want to link and press **Next**. If you have a microphone plugged into your computer it is possible to record your own 60 second audio file by pressing the **Record Audio Clip** command button.

Figure 19-11
Select link file
type

Add Multimedia Link Wizard

Select type of multimedia file

○ MS-Word document
○ MS-Excel file
○ Adobe PDF file
○ HTML web page
● Audio file
○ Video file
○ Archival Image
○ Other

Please note: to link a MS-Word, Excel, Adobe PDF, Audio, or Video file you must have software installed that can open those files.

If you choose type "Other" it must be a file that your computer workstation is capable of using. You must have the software program installed that will open, display or run that type of file.

Record Audio Clip

Next ►   Cancel

The next wizard screen depends on your selection of media type. Let's assume you choose audio file on the last screen in which case this screen is next.
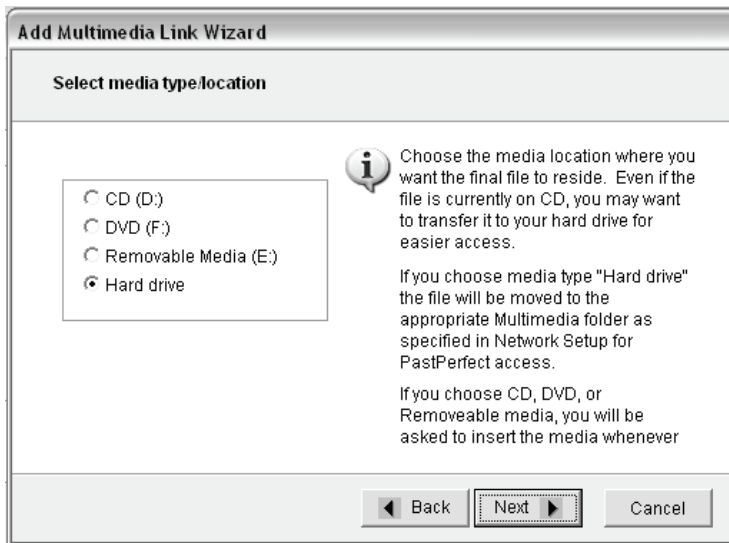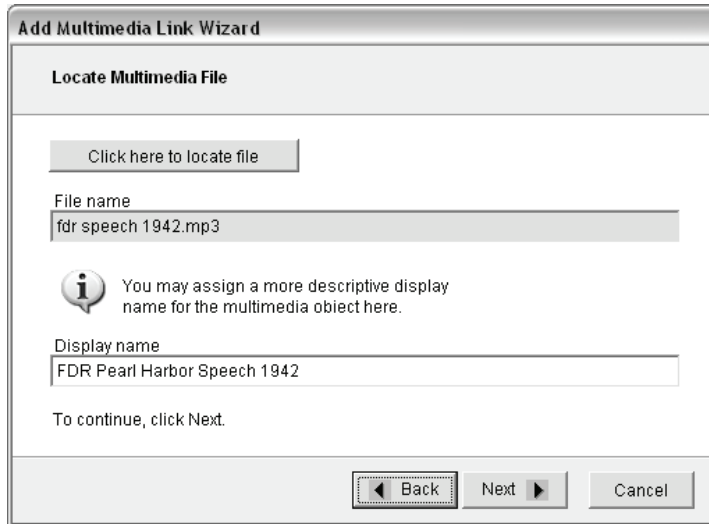
Select the media location where you want the final file to reside. Even if the file is currently on CD, you may want to transfer it to your hard drive for easier access. If you choose media type "Hard drive" the file will be moved to the appropriate multimedia folder as specified on your Setup Network screen. By default the setting is c:\pp4\muiltimedia\audio.

If you choose a media location of CD, DVD, or Removable media, you will be asked to insert the media whenever you want to view or play the link.

For this example we are going to attach an audio file that currently resides on a CD. Since the file is not large and we want it to be easy to access, let's select "Hard drive" as the media location. With this selection the Wizard will copy the file from the CD to your hard drive.

Click on **Next** to open the next Wizard screen shown in Figure 19-13. On this screen you must input the file name for the audio file we want to link. To do this click on the command **Click here to locate file** to search for the file on the CD. Once you locate the file, double-click on it and the file name will be entered on the wizard screen.
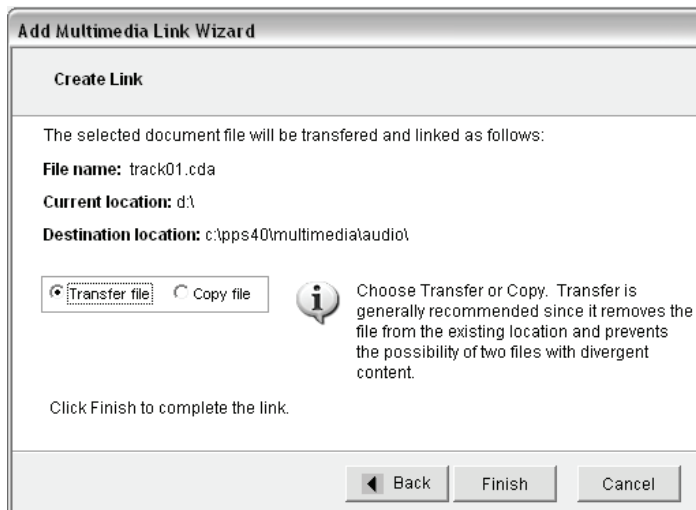
Figure 19-13
Locate link
file

Add Multimedia Link Wizard

Locate Multimedia File

Click here to locate file

File name

fdr speech 1942.mp3

ⓘ You may assign a more descriptive display
name for the multimedia object here.

Display name

FDR Pearl Harbor Speech 1942

To continue, click Next.

◀ Back   Next ▶   Cancel

The file name without its extension will be automatically entered as the Display
name for the file. You may want to change this to something more descriptive.

Click **Next** to display the final wizard screen. Here you must choose if you want
the file to be copied or transferred. Transfer is generally recommended since it
removes the file from the existing location and prevents the possibility of two
files with divergent content. However since the original file is on a CD you can't
erase it, therefore you should choose Copy.

Figure 19-14
Copy or
Transfer file?

Add Multimedia Link Wizard

Create Link

The selected document file will be transfered and linked as follows:

File name: track01.cda

Current location: d:\

Destination location: c:\pps40\multimedia\audio\

◉ Transfer file   ○ Copy file   ⓘ Choose Transfer or Copy. Transfer is
generally recommended since it removes the
file from the existing location and prevents
the possibility of two files with divergent
content.

Click Finish to complete the link.

◀ Back   Finish   Cancel

Press **Finish** to complete the link. You will be returned to the catalog record screen. Notice the link command button has changed to read **View Available Multi-media links** and its color is now green indicating a link is present.

PLAYING OR VIEWING THE LINKED FILE

Now when you click on the **View Available Multi-media links** command it will open the Play/View Multi-media Links screen. Click on a media file to play.

Figure 19-15
Play/View
Multi-media
Links
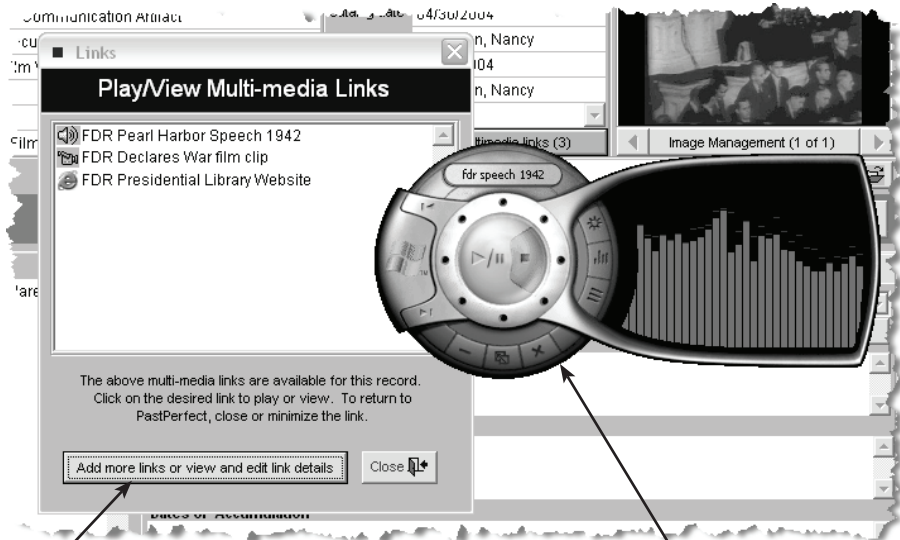
Click here to view Multi-media links information screen.

Your Windows Media Player will open to play the audio file.

Any number of multi-media files can be linked to a single catalog or accession record.

MULTI-MEDIA METADATA

PastPerfect provides an additional screen where you can record information about each linked file. This can be particularly useful for audio and video files.

Figure 19-16
Multi-media
Links Informa-
tion screen

To edit or view this metadata, click on the command **Add more links or view
and edit link details** from the Play/Multi-media Links screen. The Multi-media
Links Information screen as shown in Figure 19-16 will appear.

This screen displays the file name and location of the media file. If the file is on
removable media such as CD or DVD you can create a message that will display
instructions for locating the CD/DVD.

For digital audio and video files there are fields where you can record the date
the file was created, the file size, file type, sampling rate used to record, hard-
ware and software used to create and other relevant notes on the digitalization
process.

LINKING EXCEL SPREADSHEETS

In addition to linking multi-media files to catalog and accession records with the Multi-media Upgrade and MS-Excel you can create Excel spreadsheets for tracking detailed information about exhibits and campaigns.

To start you should setup default spreadsheets so that each time you enter a new exhibit or campaign you don't have to start with a blank sheet. This will save time by sharing common elements and layout parameters.

To define these default Excel spread sheet files click on Setup | General Information from the main menu.

Figure 19-17
Setup Default
Excel spread-
sheets

Click on **Campaign** or **Exhibit**. MS-Excel will start and open a blank spreadsheet. If you have already designed a default file, it will open. Create and save a generic speadsheet for campaigns and exhibits.

Now when you add a new campaign or exhibit, the default spreadsheet will be used to create one specific for that new record. On the campaign or exhibit screen you can open the spreadsheet specific to that record.