Learning To Use Your

SECOND OPINION™

PROFESSIONAL

Version 8.0

Second Opinion
Telemedicine Solutions, Inc.

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Start Here

Welcome to **Second Opinion Professional**. This powerful multimedia management and communication software combines image/data capture, storage, and transmission in a sophisticated, yet easy to use program. Whether you are an individual that simply wants to organize an existing collection of images, media clips, other documents and data, or an organization that wants to standardize collection, display and sharing data, you will benefit from using this software.

Second Opinion Professional lets you gather images, sound and video from many devices, including most scanners (print, slide, film), digital cameras, digital video (USB, 1394/firewire) and analog video devices (scope, camera or VCR). You can also gather any other documents, including text notes, word processor files, spreadsheets, presentations, and even database records (using specially designed **Second Opinion Professional** add-ins). Finally, you can output images to any computer printer (color, slide, photograph, or film) as well as measure and annotate them.

Second Opinion Professional stores all documents in easily retrievable folders. Folders contain identification and demographic information and can be keyed to match whatever numbering system you are currently using. Separate comments and notes can be associated with each document, as well as instrument settings and calibrations.

Second Opinion Professional also has security features that include encryption, user login, user rights, and user activity tracking.

About this Tutorial

This tutorial includes a number of lessons, each with specific tasks. It assumes that you have a basic understanding of the Microsoft® Windows® XP®/Vista®/Windows 7® operating systems, including starting applications, working with Windows, and using the mouse. If you are not familiar with or confident in this environment, we strongly suggest following the tutorials that are provided with those systems before attempting to use **Second Opinion Professional**.

After completing this Tutorial, you will understand the basic concepts of **Second Opinion Professional** and have a familiarity

with the fundamental skills you need to use the software efficiently.

Depending on the components you purchased or installed with the program, you may or may not have access to all of the functions described here.

These instructions are based on a new installation of **Second Opinion Professional** and assume you have full security rights to all of the program's features. Also, some lessons build on previous ones, so you are encouraged to follow the lessons in order.

For comprehensive instructions on how to install the program, see the "**Installing Your Second Opinion Professional**" guide.

For comprehensive information on all of the program's features and how to perform specific tasks, see the "**Using Your Second Opinion Professional**" guide.

For comprehensive information on all of the program's security features and instructions on how to manage the operation, user accounts and security privileges of the program, see the "**Configuring and Managing Your Second Opinion Professional**" guide.

Learning the Basics

This lesson orients you to the **Second Opinion Professional** environment, and it explains basic concepts needed to use the program successfully. You do not need any of the optional components or specific hardware to run this lesson.

You will start the program, log in, and open a sample folder that was copied to your system during installation of the **Second Opinion** program. You will then open a picture and practice manipulating it, and print images.

Finally, you will log out of **Second Opinion**.

Step 1. Start the Program

To begin this tutorial, launch **Document Manager**, the main application and central interface element of **Second Opinion Professional**.

- Click the **Start** button, then click **All Programs**, **Second Opinion**, and choose **Second Opinion Professional**.

The **Document Manager** window should appear with the **Login** dialog box in front.

Document Manager application icon

If the **Login** dialog box is not visible, click on the **Login** button on the toolbar.

The **Document Manager** window contains the **Title Bar**, **Menu Bar**, **Standard Toolbar**, **Communications Toolbar**, **Folder Information area**, **Document List area**, and the **Status Bar**. The Menu Bar gives access to all of the available commands. The toolbars give easy access to the most common of those commands. The **Folder Information** area displays information about the current open folder; the **Document List** area displays the documents in the current folder. The **Status Bar** shows helpful information about the current command.

You cannot access the Menu Bar or Toolbars while the **Login** dialog box is open.

Step 2. Login

The **Login** dialog box appears automatically each time you start **Second Opinion**. **Second Opinion's** security model allows the administrator of a site to define the access level of each individual user. For example, some users may be allowed to edit or create information, while others can only view it.

For this tutorial, we will log in using one of the pre-defined user accounts that ship with the program. If your system administrator has altered or removed these accounts, you may use a different account. For more information on setting up user accounts, please read the "**Configuring and Managing Your Second Opinion Professional**" guide.

The sample users should be removed or their passwords changed once the system contains real information.

1. Enter a **Login Name** of "SOSAMPLE".

2. Enter a **Password** of "1234". To prevent anybody from seeing what you type, any character you enter in this box will appear as an asterisk (*).
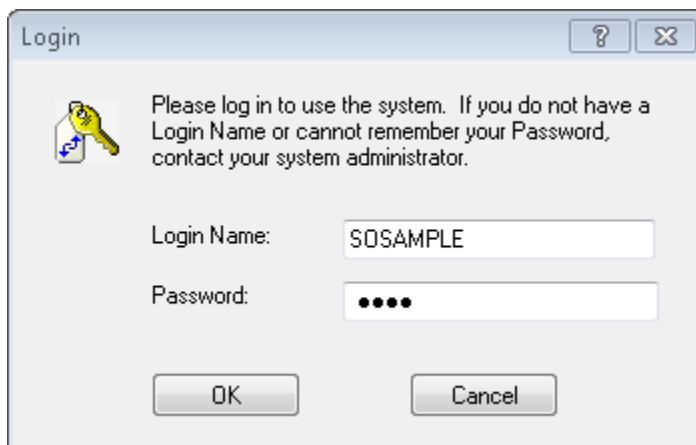
3. Click **OK**. When you do, the **Locate Folder** window usually appears automatically to allow you to choose an existing folder.

If the **Locate Folder** window does not appear, then this feature has been disabled.

If the **Locate Folder** window is not open, open the **Folder** menu and click **Locate Folder…**

You can also click on the **Locate Folder** button in the toolbar.

To narrow down the list of folders, type in a few characters of the folder you are looking for, then click **List**.

Clicking the **Change** button opens up the **Filter Folder List** window. This window has more advanced options to narrow down the list even more.
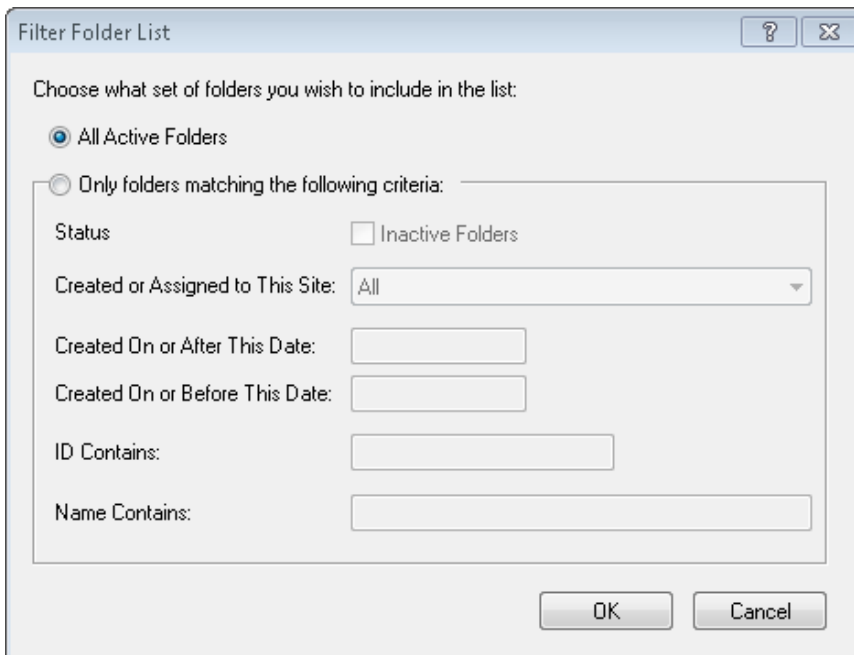
The **Filter Folder List** contains additional field selections to help narrow down the folder listing. You can use all the fields listed here in your selection process.
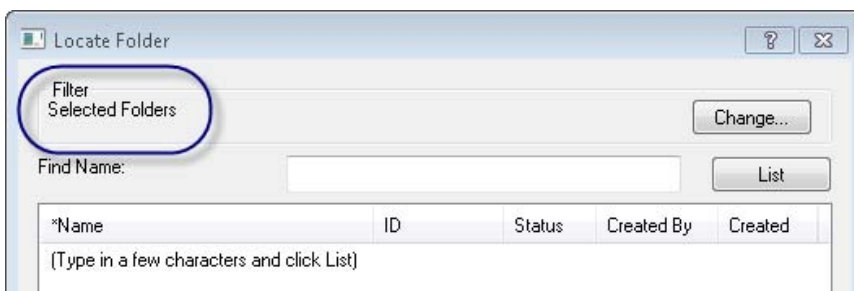
When a **Selection Filter** is activated, folders matching the selection criteria will be shown in the **Locate Folder** window.

Step 3. Open the Sample Folder

Second Opinion stores information in folders. To work with documents, you must first open a folder. We will open up the sample folder that was copied to your system during installation.

1. In the **Locate Folder** window click **List**.

2. Click on the "Sample, Patient" text to select that entry.

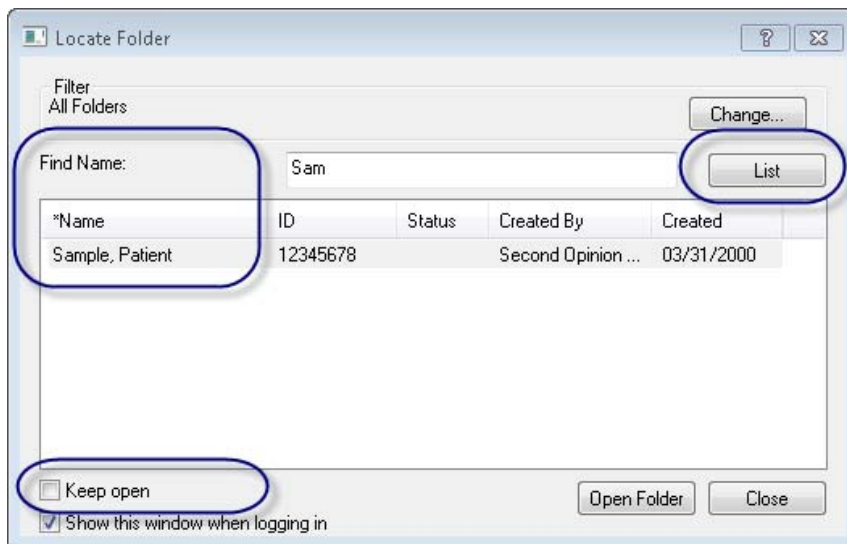The information in the **Locate Folder Listing** can be sorted by clicking on the column headers of the search results section. The column header with the asterisk represents the current sort order.

The **Keep open** check box when selected, allows you to **double-click** a folder in the list; the program will open that folder and keep the **Locate Folder** window open.
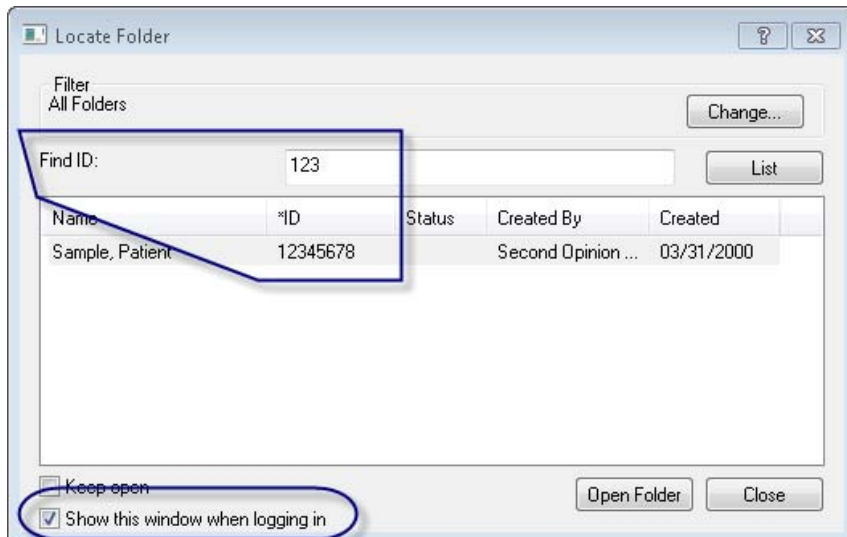
To find a folder by the **Folder ID**, click on the **ID** column header. To find a folder by **Status**, click on the **Status** column header and so on.

The **Show this window when logging in** check box sets the property that determines whether or not the **Locate Folder** window appears after a successful login. Clinical sites that typically create folders on a regular basis would uncheck or disable this feature.

3. Click **Open Folder**. The folder now becomes the current active folder and its documents are displayed in the **Document List** area.

You can also **double-click** a folder to open it.

Details view is currently selected.

The sort order of the documents can be changed by clicking on the corresponding column header.

The column header with the asterisk represents the current sort order.

Change the Way Documents are Listed

You can change the way the documents are listed to see more or less information.

1. Click on the **View** menu. Notice that as you move the mouse pointer across the various menu commands or toolbar buttons, the Status Bar updates to display what the command does. Additionally, if you hold the pointer over a toolbar button, a small window called a **ToolTip** appears next to it, naming the command.

2. Click on **Large Icons** to see thumbnail representations of the documents, or **Details** to see the detailed document information.
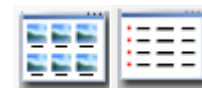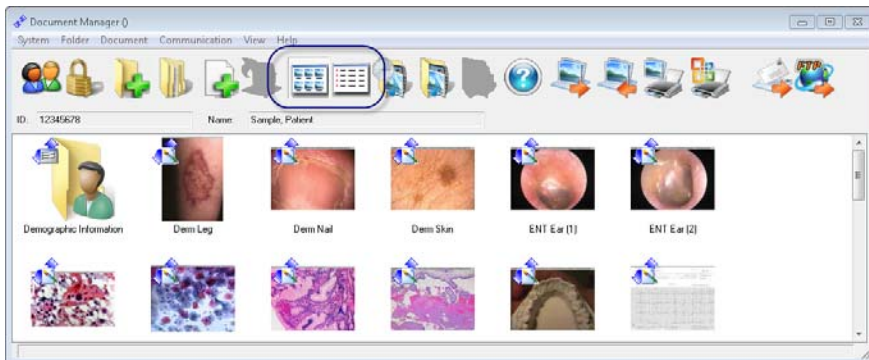
You can also click on the **View** buttons to switch back and forth between **Detail** and **Large Icon** views.

3. Click on **View** menu, then click on **Group by Session** to see documents grouped by individual sessions or **Group by Doc Type** to see documents grouped by document types (images, videos, forms).

You can also click on the **Group by Session** or **Group by Doc Type** buttons.
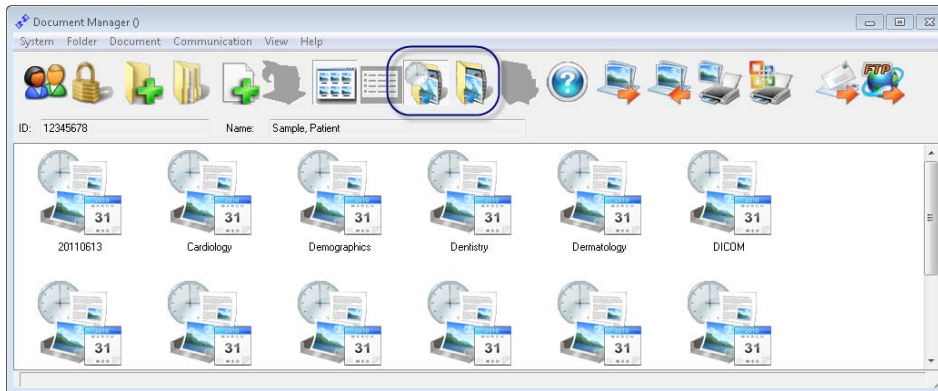
Group by Session view selected.

4. Double-click the session labeled Dermatology and you will see the documents contained in that session.
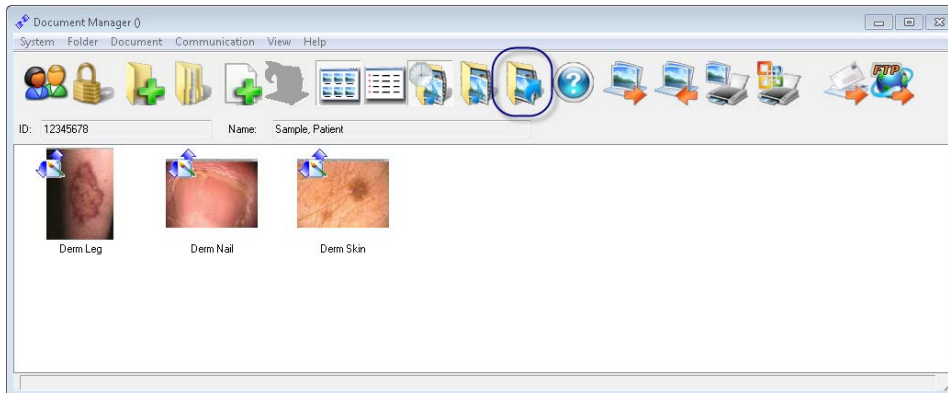
You can also click on the **Back to Session** button

5. Click on **View** menu, then click on **Back to Sessions** to return to the sessions view.

6. Click on **View** menu, then click on **Group by Sessions** to exit the sessions view.

You can also click on the **Group by Session** button to exit the sessions view.
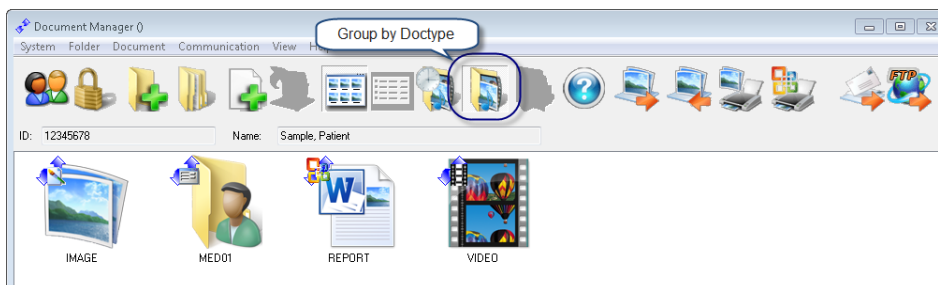
Step 4. View Document Information

You can view the information associated with a document, including any notes.

1. Click on the "Derm Leg" entry to select it.

2. Click on the **Document** menu.

3. Click on **Information**. A window with the document's information will appear.
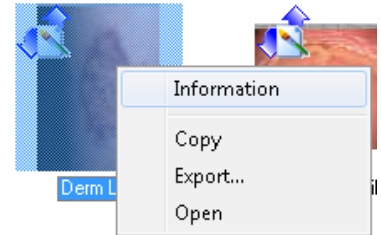
Using your mouse you can also **Right Click** on the document and a quick menu will appear, then click **Information**.

If you did not originally create the Derm Leg image, you are not allowed to edit any of the information; you can only view it.

Id contains the unique Id of the document (no two documents in the same folder will have the same Id). The **Description** field contains the name of the document. The **Notes** field contains any additional information about this document. **Details** contains the name of the site that created the document, the unique Id of that site (Site Ids are assigned by Second Opinion Telemedicine Solutions, Inc.), the date and time the document was captured, and the document's physical size.

4. Click **OK** to close the dialog box.

Step 5. Open a Sample Document *(Fixed Tile Mode)*

Open the "Derm Leg" image.

1. Click on the "Derm Leg" entry to select it.

2. Click on the **Document** menu.

3. Click **Open**. This will start the **Second Opinion Image Viewer** and display the picture. Notice that the current folder name ("Sample, Patient") appears in the Image Viewer's title bar and the picture's name ("Derm Leg") appears in the picture's title bar.

Using your mouse you can also **Right Click** on the document, then click **Open**.

Double-clicking a document also opens it up.
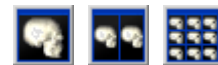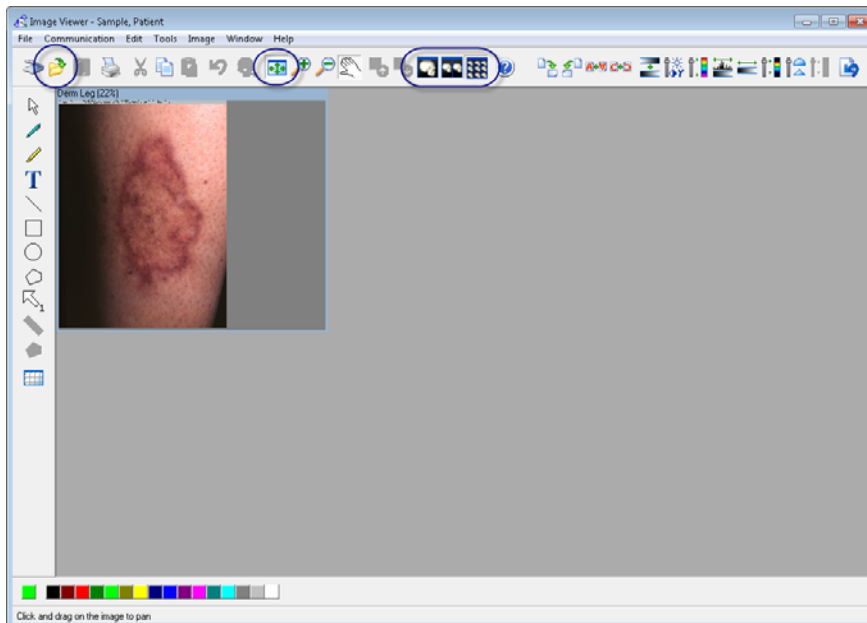
Click on the **View Entire Image**, **Tile 2x1**, and **Tile Multiple** buttons to see the effect on the **Image Viewer**.

The **Fit to Window** button re-sizes each of the displayed images so that no matter where the auto-tiling pattern is set you can see the entire image on the screen.

The **Second Opinion Image Viewer** has two modes of operation, **Fixed-Tiling** and **Free Form Tiling**. The fixed-tiling mode, which is displayed above, automatically tiles images, as they are loaded. This is very helpful when viewing a large number of images at one time. The fixed-tiling pattern can be set to 1x1, 2x2, all the way up to 5x5.

Open additional documents to view fixed-tiling in action.

1. In the **Image Viewer** click on the **File** menu.

2. Click **Open…** This will cause **Document Manager** to come forward.

3. Double-click on the "**Rad HiRes Knee**" image to open.

You can also click on the **Open** button to bring **Document Manager** forward.
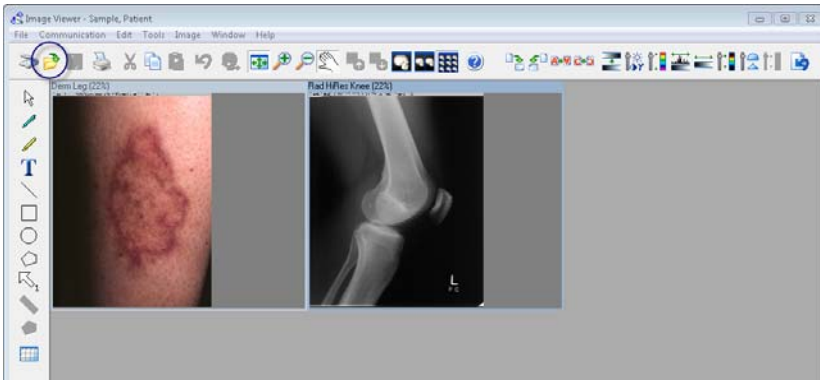
Go ahead and open a few more images of your choice.

1. In the **Image Viewer,** click on the **File** menu.

2. Click **Open…** This will cause **Document Manager** to come forward.

3. Double-click on the image of your choice to select and open.
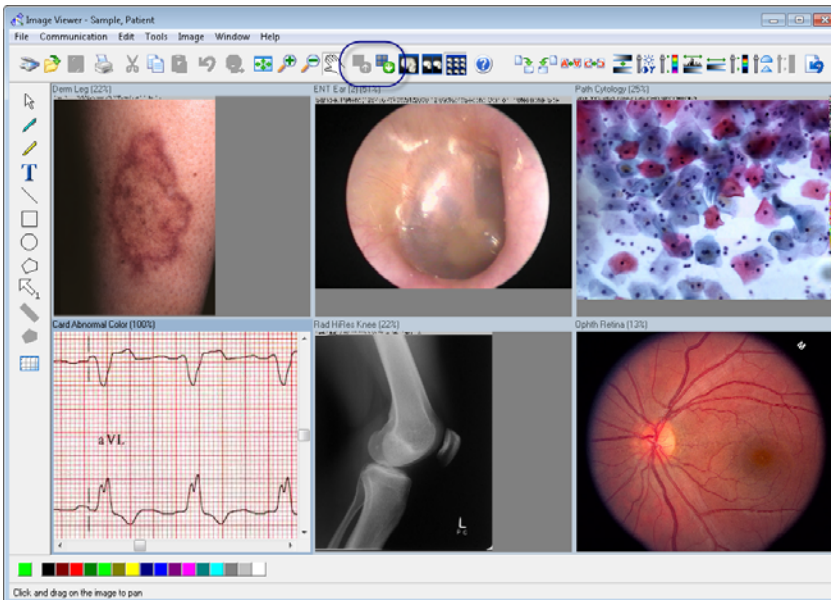
Click on the **Next Tile Set** and **Previous Tile Set** buttons to quickly page through all of the open images.

Open the **Window** menu and click **Image Layout** to change the auto-tiling setting.
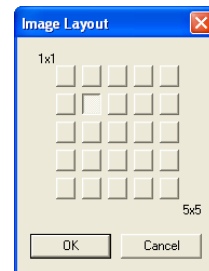
To switch the **Second Opinion Image Viewer** to the free-tiling mode, open the **Window** menu and click **Fixed Tile Mode** to uncheck the menu choice. The following message will be displayed.
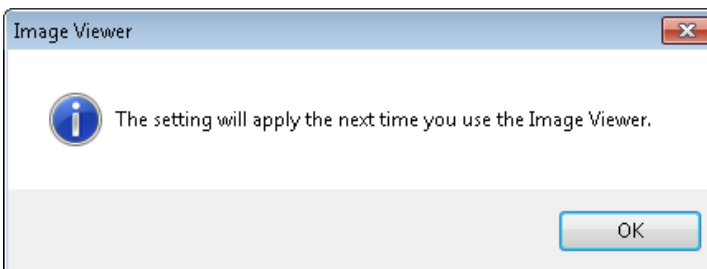
4. Click on the **Close** button on the **Image Viewer's** Title Bar.

Close button

Step 6. Open a Sample Document *(Free Tile Mode)*

1. Double-click on the "**Ophth Iris**" image.

   This will start the **Second Opinion Image Viewer** and display the picture.
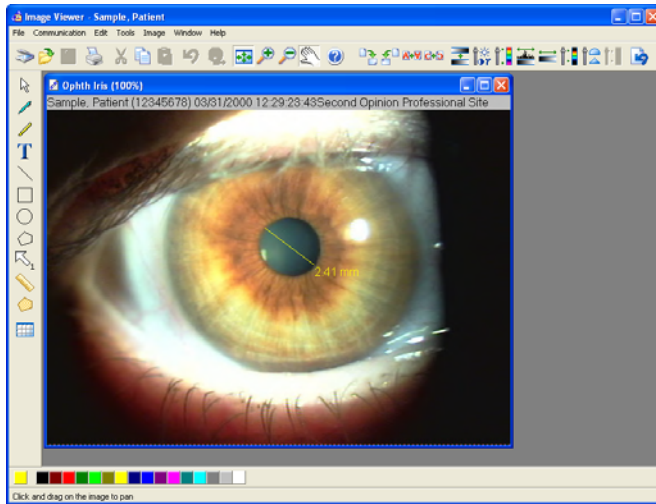
Step 7. Working with the Image

If the image contains an area of detail that you wish to examine more closely, you can zoom in to that area. If the image is larger than what you can see at one time on the screen, you can zoom out to see more of the image.

Zoom In

You can zoom into a picture in order to better examine it.

1. Click on the **Image** menu.

2. Click **Zoom In**. The picture is now enlarged. Notice that the current zoom factor is displayed in the picture's title bar.

You can also click on the **Zoom In** button on the **Annotation** toolbar or press the plus (+) key on the keyboard.
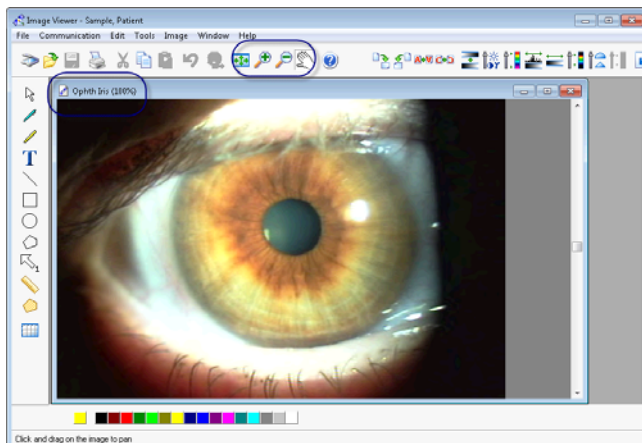
You can repeat this process to further enlarge the picture up to one thousand percent (1000%).

Move Image Parts into View

When the entire image is not visible in the available screen area, you can move the image to show hidden parts.

1. Click on the **Tools** menu.

2. Click on the **Pan** command to select that tool.

3. Position the mouse pointer over the center of the image. Notice that it changes shape to represent a hand.

4. Press the left mouse button and hold it as you drag the mouse to a different location. As you do, the image moves with it.

5. When the desired image portion is in view, release the mouse button.

You can also click on the **Pan** tool in the **Annotation** toolbar or use the scroll bars.

Zoom Out

You can also decrease the size of the image. This is especially useful if an image is too large to fit entirely on the screen.

1. Click on the **Image** menu.

2. Click **Zoom Out**.

You can also click on the **Zoom Out** button on the Annotation toolbar or press the minus (–) keys on the keyboard.
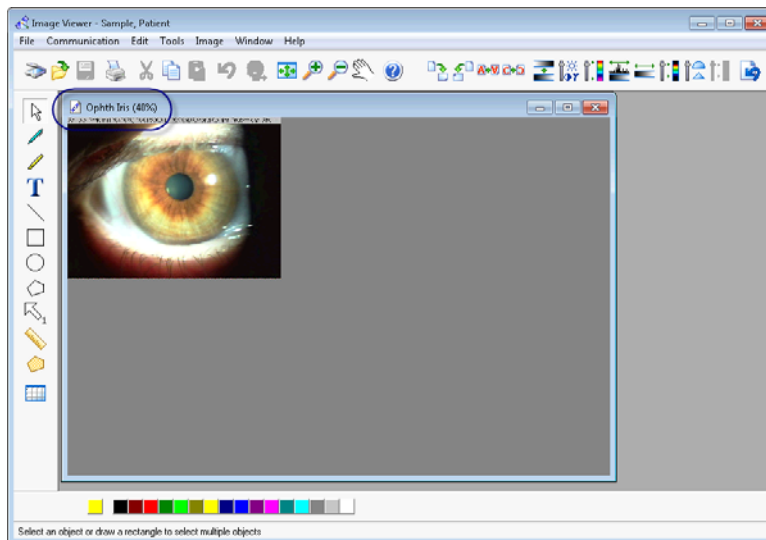
You can repeat this process to reduce the size of the picture down to twenty percent (20%).

3. Restore the image to 100% by zooming in.

Step 8. Open Additional Documents

You can open additional documents to view at the same time.

1. In the **Image Viewer** click on the **File** menu.

2. Click **Open…** This will cause Document Manager to come forward.

You can also click on the **Open** button to bring **Document Manager** forward.

3. Double-click on the "**Rad HiRes Knee**" image to select it and open it.
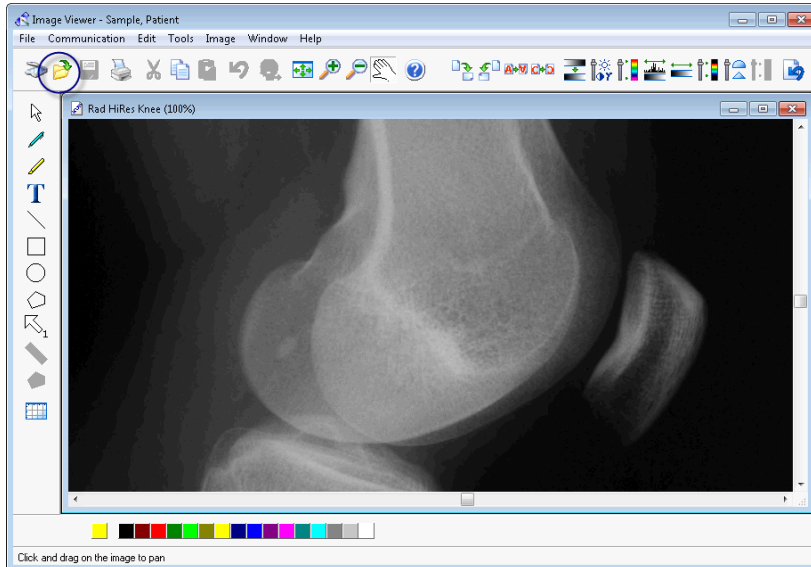
The knee x-ray image is also opened in the Image Viewer and appears on top of the iris image.

Step 9. Tile Images

You can tile all the open documents in order to see them at the same time.

1. In the **Image Viewer**, click on the **Window** menu.

2. Click **Tile Vertical**.
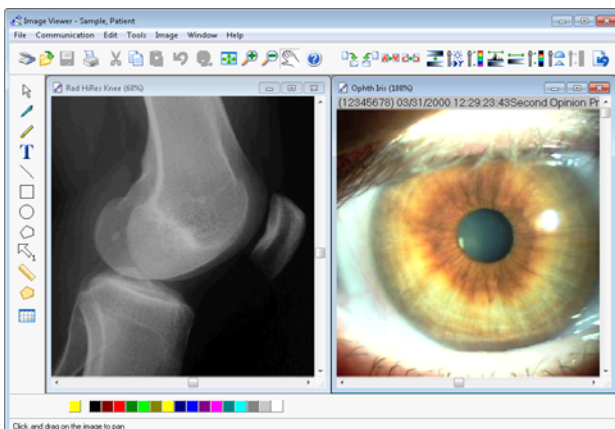
All of the open documents are arranged to fit on the screen.

1. In the **Image Viewer**, click on the **Window** menu.

2. Click **Tile Horizontal**.
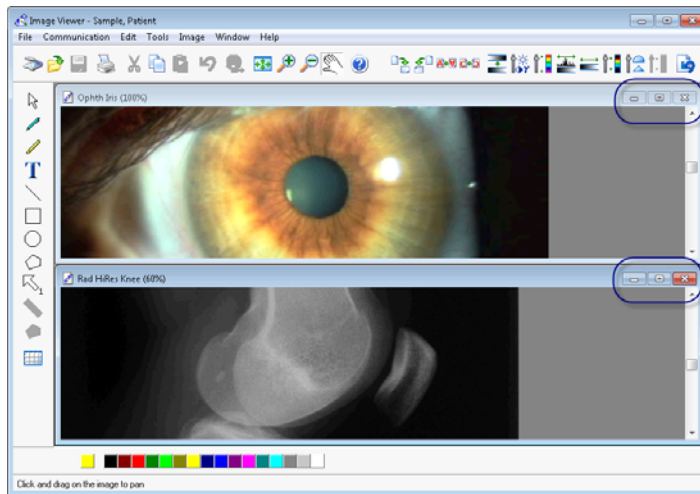
Step 10. View an Image Full Size

Viewing an image full size hides all the other images behind it and allows the maximum viewable area for that image.

- To view the image of the eye full size, click once on the **Maximize** button located on the image's Title Bar (not the application's Title Bar).

Maximize button

The image will now be displayed at the full size of the work area. You can then restore it back to its original size.

- Click on the **Restore** button located on the right of the Menu Bar. The top row of buttons is for the entire application, while the second row applies to the image.

Restore button

The image will now be returned to its original location and size.

Step 11. Close the Images

When you are done working with an image you can close it.

1. Click on the **Close** button for the image.

2. Repeat the process for the other open image.

Close button

Step 12. Close the Image Viewer

When you are done working with images, you can close the **Image Viewer**.

- Click on the **Close** button on the **Image Viewer's** Title Bar.

Close button

Step 13. Printing Images

The are a variety of different way to print images from within **Second Opinion**. You can print images directly to a printer one at a time using the print functions within the **Image Viewer.** You can print images to a **WordReport**, this is helpful if you want to associate text with an image or images. You can also create a **PowerPoint** presentation and print the images as slides from there. Lastly, you can use the **Image Print Manger**. The **Image Print Manager** is a very power tool to help you print images directly to a printer with a variety of options and settings.

For this lesson we will go over the functionality of the **Image Print Manager**.

1. From the **Document List** area of **Document Manger** select four.

2. Click on the **Image Print Manager** on the Standard Toolbar

It does not matter which view is active, **Large Icon** or **Details** view when images are selected. Images can be selected in a variety of ways. You can use your mouse; left click your mouse and draw a square. All of the images the square touches will be selected.

Standard Windows selection conventions are also supported; like clicking on the first image and with the shift key down click on the last item. This will select the entire range, or with the CTRL key down, you can individually click the left mouse button selecting or deselecting images.

3. The printer preview window will appear. Click the **4 Image per page** from the dropdown list. From here, you can fine tune your printout by choosing additional options. Click on any of the other options and see how the preview changes. The window shows exactly what will print on the printer. Click **Print**.

4 images per page with Best Fit selected.

Step 14. Log out of Second Opinion

When you are done working with **Second Opinion**, you can either exit the program or log out. To log out, click **Logout** from the **System** menu.
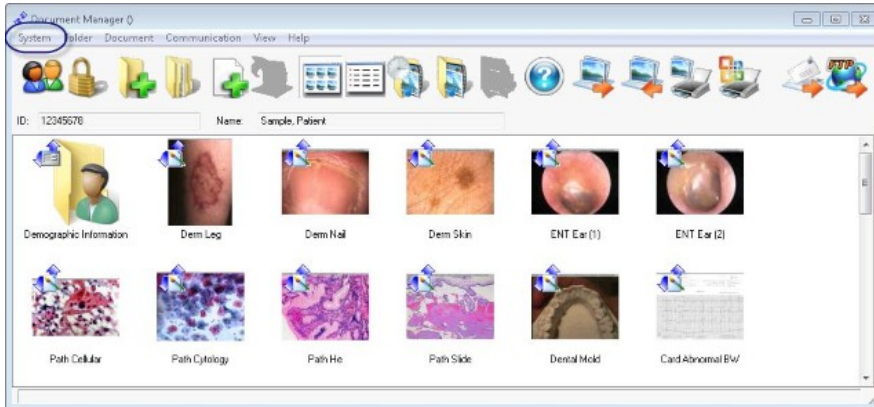
You can also click on the **Logout** button.

Conclusion

You have completed the first lesson and have learned to do the following tasks:

- Log into **Second Opinion**

- Open a folder using **Folder**, **Locate Folder**

- View document information using **Document**, **Information**

- Open documents to view using **Document**, **Open Selected**

- Use the **Image Viewer** in both Fixed and Free Tile modes.

- Zoom in and out of images using **Tools**, **Zoom In**/**Out**

- Tile images using **Window**, **Tile Horizontal**/**Vertical**

- View an image full size using the Maximize button

- Close images and the **Image Viewer**

- Print images with **Image Print Manager**

- Log out of **Second Opinion**

Working with Folders

Folders allow Second Opinion to organize documents.

In this lesson you will create a new folder using the patient demographic information form that ships with the program.

Step 1. Create a New Folder

All documents need to be stored in a folder. You can create a new patient folder and enter demographic data about that patient.

Start a New Demographics Form

1. Start **Second Opinion**, if necessary, and log in with a Login Name of "**SOSAMPLE**" and a Password of "**1234**". Again, if your system administrator has removed or altered that account, use a different account.

2. If the **Locate Folder** window appears, click the **Close** button.

3. Click on the **Folder** menu.

4. Click **New Folder…** This will start the **Patient Demographics Information form**.

See Lesson 1 Step 2 in this tutorial for a refresher.

You can also click on the **New Folder** button.

Fill In the Demographics Form

Across the top of the Demographics Information window there are
three tabs: **Identification**, **Address**, and **Reference**.

1. In the **Identification** page, enter a **Patient ID** of "Tutorial1"
    (you can enter up to 25 characters in the Patient ID). Press the
    Tab key to go to the next field.

2. Enter a **Social Security Number** of "123-45-6789". Notice
    that the dashes automatically appear in the correct places. Press
    the Tab key to go to the next field.

    The mask in the Social Security Number can be changed in the Settings.ini file located in the **Second Opinion** program directory.

3. Enter all four digits of the year in **Date of Birth** field and that
    the age is automatically calculated when you exit that field.

4. Enter the rest of the information as indicated below.

When you get to the **Ethnicity** field, proceed to the next step.

The **Patient ID** (Folder ID) and **Name** fields (Folder Description) are the only mandatory fields when creating a new folder. All of the other fields can be ignored or entered at a later date.

5. The contents of most lists in **Second Opinion** can be customized. To customize the contents of the **Ethnicity** and all other drop-down lists, place the cursor anywhere in that field and press F2.
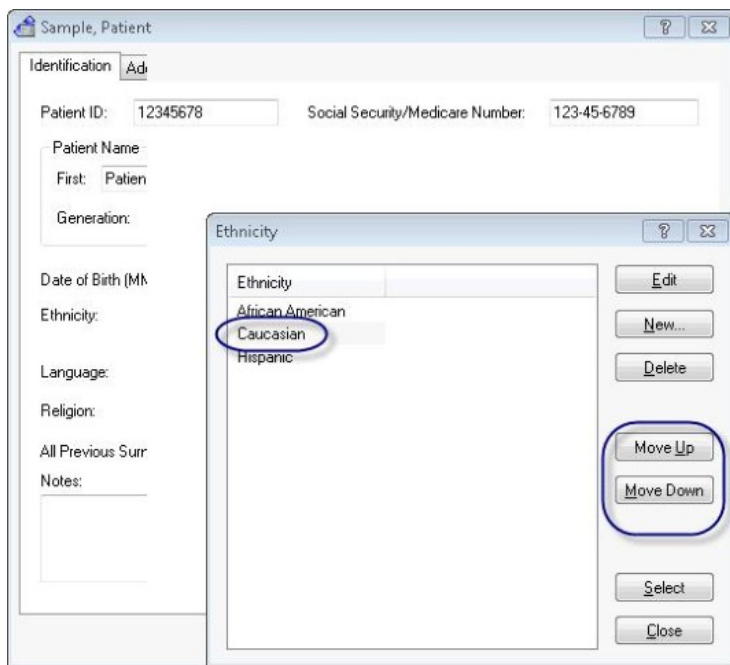
6. You can add, edit, or remove entries from the list. Enter the values displayed above; then select an entry and click **Select**.

7. Complete the remaining values on this screen and be sure to practice customizing the lookup fields.

The look up values are inserted into the list in alphabetical order. You can use the **Move Up** or **Move Down** buttons to re-order the list. This allows you to move the most often used values toward the top of the list. These values remain in the lookup database for future use.

8. Click on the **Address** tab and enter additional information as indicated below. After you fill in the **Line 2** field, proceed to the next step.

9. When you press Tab while in the **Line 2** field, the focus goes to the **Zip/Postal Code** field and not the **City** field. When you enter a value in the **ZIP/Postal Code** field, the system will look for a matching value in the database to use to automatically fill in the **City**, **State/Province**, **County/Region** and **Country** fields.

    If the ZIP code is not found, the **Save Zip/Postal Code Lookup** window will appear. Fill in the fields as follows:
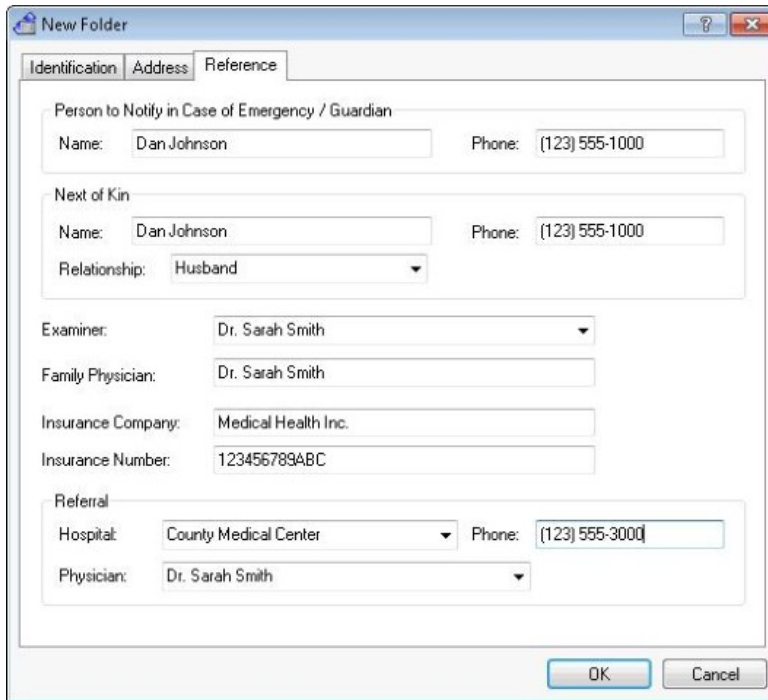
10. Click **OK** in the **Save Zip/Postal Code Lookup**. Notice that the **City**, **State/Province**, **County/Region** and **Country** fields are automatically filled in.

11. Click on the **Reference** tab and fill it in as follows:

11. Click **OK** to close the dialog box and save the entries. The new patient becomes the active patient in **Document Manager** and a "Demographic Information" document entry is created for the form you just filled in.
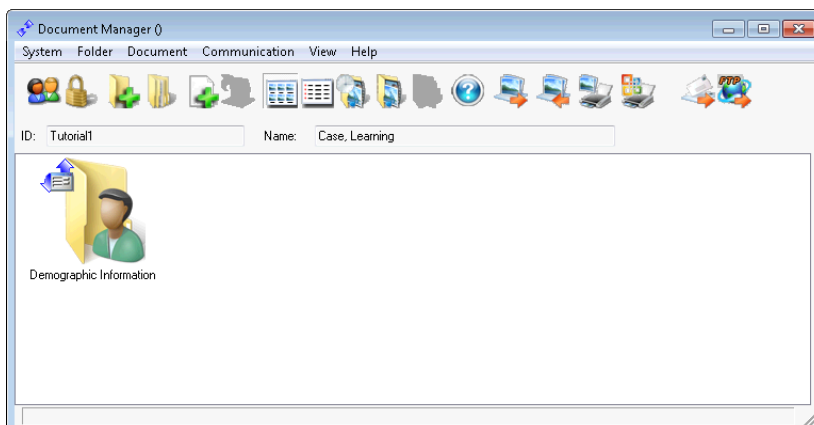
Step 2. View and Edit Folder Information

You can view and edit the folder information at any time.

View Demographic Information

Double-click on the "Demographic Information" document. The Demographics Information Form appears with the patient information.

In the future, if you open a Demographics Information form and all of the fields are grayed out and you are unable to edit the information this means either you do not have the security privilege to edit the data or the folder was not created at your facility and belongs to another site.

Edit Patient Information

If your site created the folder, you can edit the Demographic Information. Only the system administrator can edit the **Patient Id** once the folder has been created.

1. Click on the **Address** tab and click in the **Other Phone Number** field

2. Replace the entry with "**(123) 555-3000.**"

3. Click **OK** to save the changes.

The patient information is now updated with the new information.

Conclusion

You have completed this lesson and have learned to do the following tasks:

- Create patient folders using **Folder**, **New Folder**

- View folder information by opening the Demographics Information form

- Edit folder information

Digital Camera

Second Opinion makes it easy to get images from digital cameras and add them to a folder. You can do this in a variety of different ways. You can connect the camera to the computer after the fact and retrieve the images via a TWIAN or WIA interface, you can remove the memory card from the camera and manually import the items or you can use a Wireless File Transfer adapter like an Eye-Fi SD memory card and wirelessly retrieve the photos and videos as they are being captured and have them automatically saved into the current folder.

If you plan on connecting the camera to the computer to retrieve the items from your digital camera via a TWAIN or WIA interface, please refer to Lesson 4, Scanning Images for the steps to do this.

In this lesson we will cover connecting the camera to the computer via an Eye-Fi wireless adapter and removing the memory card from the camera and manually importing the items.

To complete this lesson, you need to have a digital camera and the Second Opinion Image Import Manager setup monitoring a particular folder on the computer. If you are unfamiliar with this utility please refer to the Image Import Manager instruction sheet. It will walk you through setting up the environment to successfully import images from a digital camera. If you will be using an Eye-Fi adapter and it is not yet setup and configured, please refer to the Configure the Eye-Fi Card instruction sheet for step by step instructions.

Using the Image Import Manager utility simplifies the process of importing items into the current folder. Just about any photo, video or document that is saved into a monitored folder will be automatically processed and saved in the current patient folder. Photos are stamped with patient's identifiers and saved in the file format specified in the Image settings section of the program. MultiMedia Manager can also be used to do this. Any image or video clip can be "dragged and dropped" in the MultiMedia Manager preview window. Once there, they can be individually inspected for content, named and saved. If you want to import photos into a folder without processing them, you can simply drag and drop the photos or any other document type into the main Document Manager folder window.

Before You Begin – Activate Image Import Manager

To start the application, **Click** on the **Image Import Utility** tool bar button or **Click** the **New Document** button, expand the **Tools** section and **Click** on **Image Import Utility**. Once active, **Click** **Minimize**.
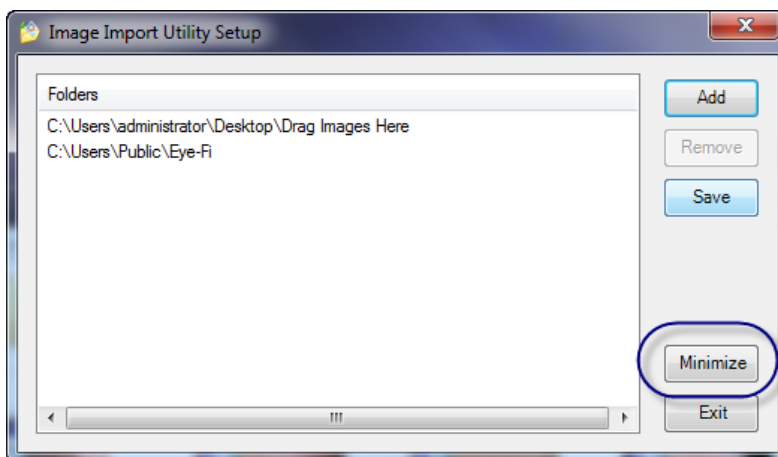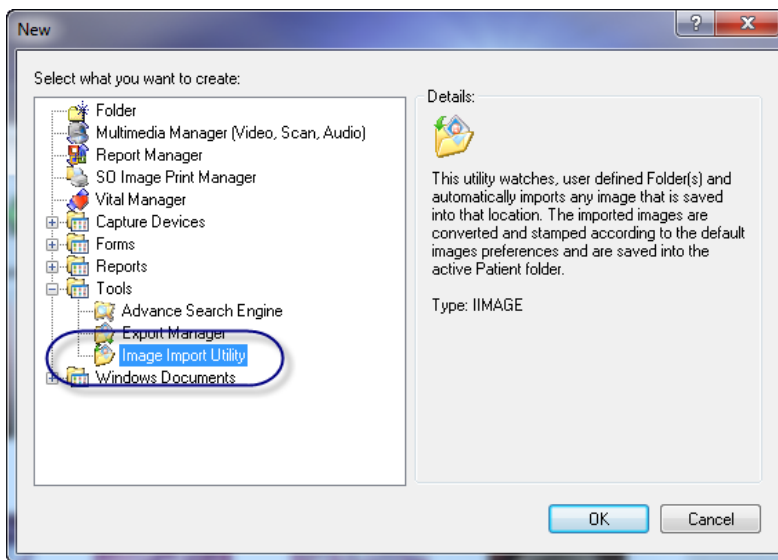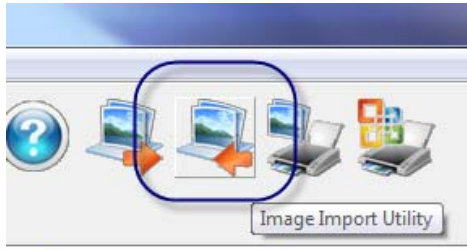
Step 1. Select a Folder

Make sure you have the correct patient folder open for the images and video clips to me be saved into. If you are not sure how to do this, Refer back to Lesson 1.

Step 2. Start Taking Pictures

Turn on the digital camera with the Eye-Fi SD adapter card installed and start taking pictures. Sometimes it takes from 30 seconds to a couple of minutes for the Eye-Fi wireless file transfer adapter to activate. Once active, any JPEG or RAW format photo or video clip already stored on the memory card, will start transferring to the computer. The items are transferred to a folder being monitored by the import utility. Once transferred, the import utility will process and save the item into the current patient folder.
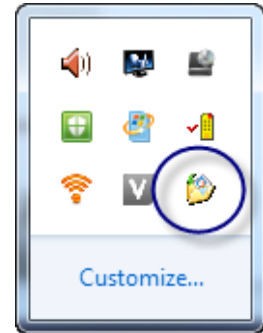
Image Import Manager active status icon.

Verify the items and edit the description if necessary. To edit the description, **Right Click** the item and **Click Information** on the pop-up menu.

Step 3. *Manually Import Images*

If you are using an Eye-Fi card and the images do not automatically transfer during use or if you are using a standard digital camera memory card and you want to manually import the items, below are the steps to do that.

Before you continue, make sure the Second Opinion Image Import Manager utility is running.

1. Remove the memory card from the camera and plug it into a memory card reader connected to your computer. When the computer recognizes that the card is from a digital camera or that it contains multimedia content on it, the **Import Photos and Videos** Wizard included with Windows will appear.
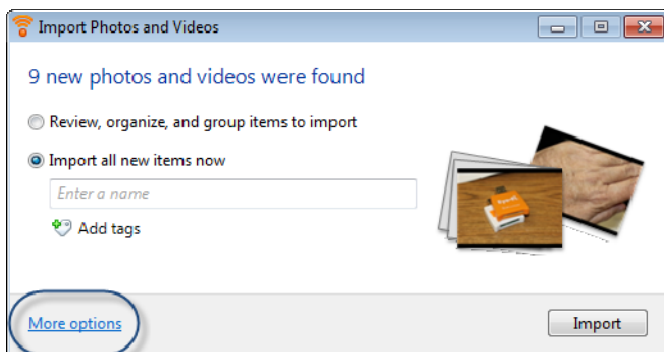
2. **Click More options** to validate the settings for the utility.
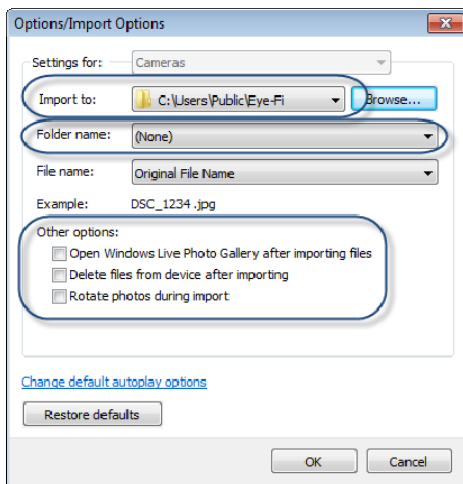
Verify the **Import to:** file location. Make sure it points to a Folder being monitored by the Image Import Manager utility, and make sure the **Folder name:** is set to (None). Lastly, make sure nothing is selected in the **Other options:** section. **Click OK** and continue the import process. Just like using the Eye-Fi card, the items will be transferred to a monitored file location, processed, saved into the current Patient Folder and deleted.

Conclusion

You have completed this lesson and have learned to do the following tasks:

- How to activate Image Import Manager

- Automatically receive photos and video from a digital camera using an Eye-Fi wireless files transfer adapter card

- Manually import multimedia content from a memory card

Scanning Images

Second Opinion makes it easy to bring images in from a variety of scanners (TWAIN devices) and add them to a folder. Examples of scanners include flatbed, film, slide, print, drum, hand held, and some digital still and video cameras.

To complete this lesson, you need to have a scanner of some type installed on your computer and the scanner's TWAIN software drivers loaded. See the documentation that came with your scanner for installation instructions.

In this lesson we will select a scanner, scan an image, and save it to a patient folder.

Over time the TWAIN standard has been revised to keep up with the ever changing imaging technologies. **Second Opinion** has two different add-ins that have scan capabilities, **Scan Images (Legacy)** and **MultiMedia Manager**. **Scan Images (Legacy)** was designed to support the older TWAIN standard and **MultiMedia Manager** supports the current TWAIN devices as well as Windows Image Acquisition (WIA) devices. For this lesson we will be using Scan Images (Legacy) add-in.

If you run into problems during this lesson with your scanner / imaging device, it may not be fully supported in **Scan Images (Legacy)**. Try using **MultiMedia Manager**. See **Learning To Use MultiMedia Manger**.

Before You Begin – Select a Scanner

If you are not sure whether or not you have selected a TWAIN device you need to do so. To do this you need to open up a different Folder that contains at least one image and open up an image. With the **Image Viewer** open click on **File**, then click **Select Scanner…**, lastly select the source you want to use.
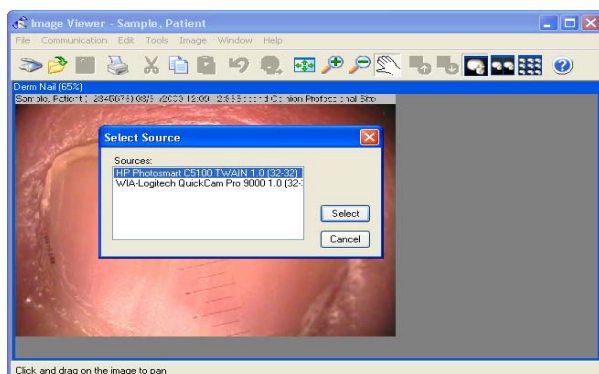
Step 1. Scan an Image

Once a scanner has been selected, you can scan one or more
images into the folder.

1. In **Document Manager**, open the **Document** menu and click
    New Document….

You can also click on the **New Document** button.
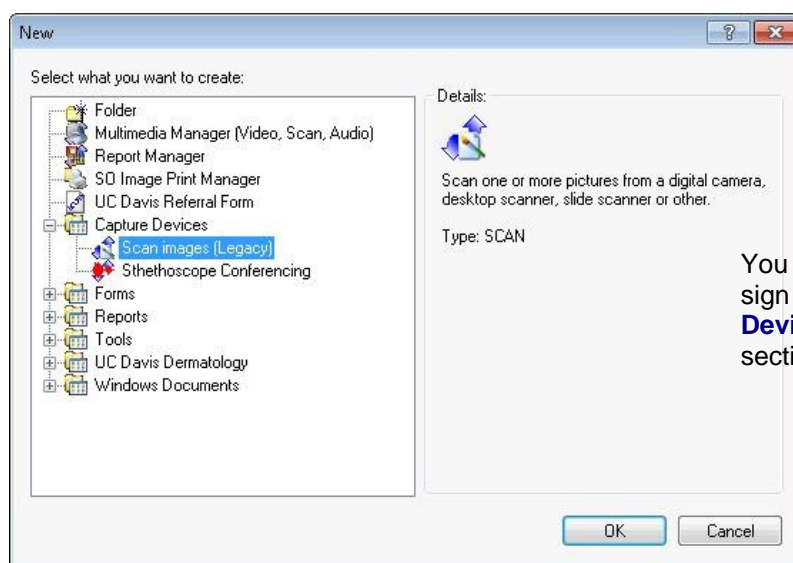
You can either click on the +
sign or double-click **Capture Devices** to expand the
section.

2. Select the "**Scan images**" entry in the **Capture Devices**
    section. Notice that a description of that entry appears in the
    Details section on the right.

3. Click **OK**. This will start the **Image Viewer** and the scanner's
    software. Please consult the documentation that came with
    your scanner for instructions on using and configuring it.

The exact steps you take to preview or scan an image depend
entirely on the type of scanner you have. Some software, such as
that for digital still cameras, will allow you to choose more than
one image to be transferred at the same time.

4. Make any necessary selections and adjustments in the scanner
    software and click the appropriate button in that software to

accept the image and transfer it to the **Image Viewer** (the button may be called **Capture**, **Scan**, **OK**, **Final**, etc.).

Step 2. Save Scanned Images

After you have scanned in your images, you can save them in the folder. If you do not save the images, **Second Opinion** will ask you if you want to save them before closing the folder.

1. In the **Image Viewer**, open the **File** menu and click **Save**.

You can also click on the **Save** button.

2. In the **Description** field, type "**Scanned Image**". Descriptions can be up 30 characters long and can contain spaces. The **Session** field defaults to the current date; it can be changed at this time. Sessions can be up to 35 long and can contain spaces.

3. In the **Source** field, select the type of device that originally generated the picture. To add additional **Instrument sources**, go to the **Document Manager** window, select **System**, **Preferences…**, then click the **Instruments** tab.

4. Type any notes you want in the **Notes** field. Notes can contain multiple lines of text.

5. Click the **Save** button. The image will be saved into the current folder.
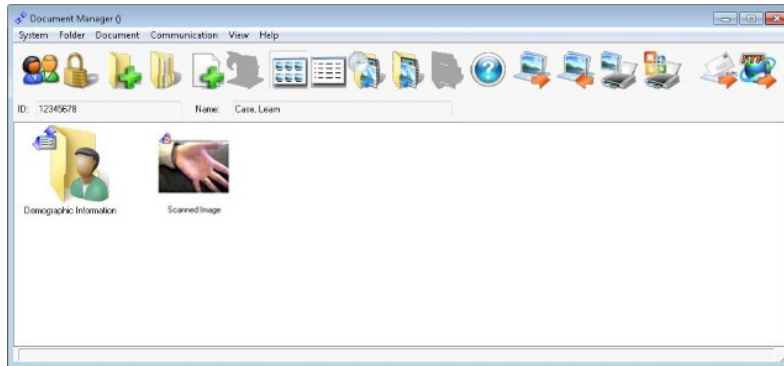
Step 3. Scan Additional Images

While you are in the Image Viewer, you can scan additional images.

1. Select **File**, **Scan**.

2. The scanner's software will run to allow you to scan one or more images.

3. You may now scan a new picture or cancel the scan.

4. Finally, exit the Image Viewer by clicking on the Close button.

You can also click on the **Scan** button.

Conclusion

You have completed this lesson and have learned to do the following tasks:

- Select a Scanner / TWAIN device

- Scan one or more images into a folder using **Document**, **New Document**, **Scan images (Legacy)**

- Scan additional images while in the Image View using **File**, **Scan…**

- Save a document into the folder using **Document**, **Save**

Capturing Images From Video

The video capture add-in allows you to capture still images or digital video clips from a video camera, VCR, or other video device that is connected to the computer.

To complete this lesson, you will need to have a video capture card installed in your computer and the card's Video for Windows drivers installed. See the documentation that came with your video capture card for installation and configuration instructions.

In this lesson you will learn to capture several still frames from a video source.

There are two different video capture standards that **Second Opinion** supports, Video for Windows (VFW) and Windows Driver Model (WDM). **Second Opinion** has two different add-ins that have video capture capabilities, Capture Video (Legacy - VFW) and MultiMedia Manager. Capture Video (Legacy - VFW) was designed to support the older VFW standard and MultiMedia Manager supports the current WDM devices. For this lesson we will be using the Capture Video (Legacy - VFW) add-in.

If you run into problems during this lesson with your video capture / imaging device, it may not be fully supported in Capture Video (Legacy - VFW) and you should try using MultiMedia Manager. See Learning To Use MultiMedia Manager.

Step 1. Start the Video Capture Add-In

1. Turn on your video source. If it is a VCR, play a tape.

2. From **Document Manager**, open the **Document** menu and click **New Document…**

   You can also click on the **New Document** button.
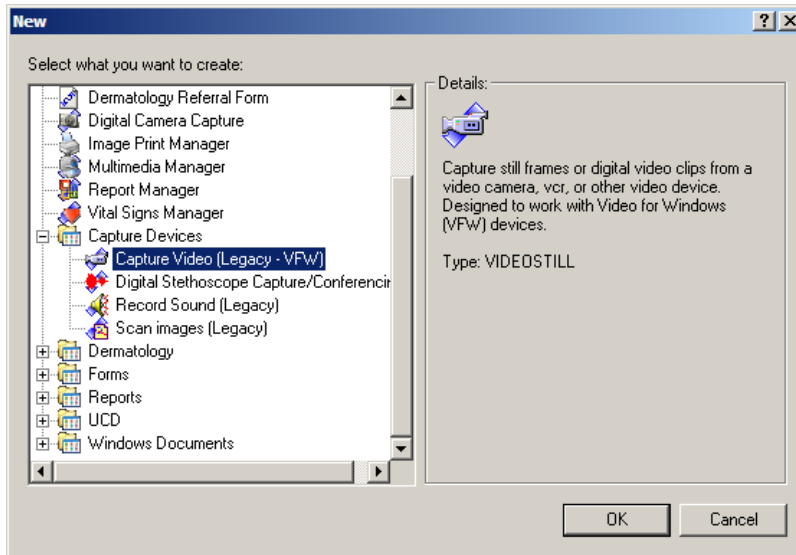
3. Choose the "**Capture Video (Legacy – VFW)**" entry in the **Capture Devices** section.

4. Click **OK**. This will start the video capture add-in. If your video source and device are set up correctly, you will see a preview of the video in the window.
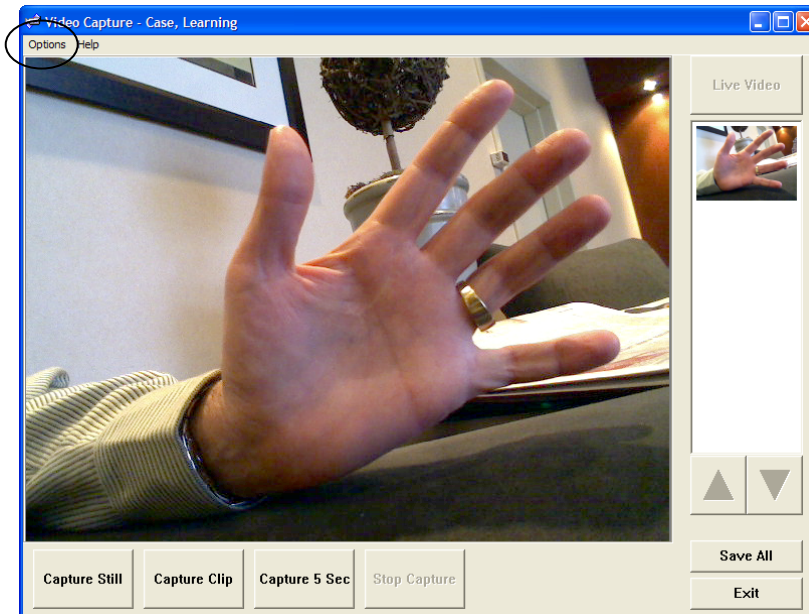
Trouble Shooting Tip

If you get the message, **No Video Capture Device Found**, click **Options** then select the device you are trying to use. It will be at the bottom of the Menu List. If it is not listed then either the device drivers are not properly installed or the device is not supported.

If there is a problem with the video preview click **Options**, then **Video Source** and make sure the correct video input is selected.

If the video preview does not take up the entire preview window, click **Options**, then **Video Format** to adjust the size, 640x480 is the maximum size.

Step 2. Capture a Still Frame

Click on the **Capture Still** button, hit the space bar, or tap your foot pedal to immediately capture the next frame. Each captured frame will appear in a list alongside the video preview window.

Step 3. Capture a Digital Video Clip

Your video capture device must support video clip capture and must also be properly configured. If you do not have this capability, you may skip this step.

1. To begin recording, click on the **Capture Clip** button. The program will begin recording the video.

2. When you wish to stop recording, click **Stop Capture** or click the RIGHT mouse button.

To capture video clips of a specific length, click on the **Capture 5 Sec** button. Each captured clip will appear in a list alongside the live video window.

Step 4. Review Captured Stills and Clips

Click on the desired image in the list alongside the video window. The still or video clip will replace the live video. Click the **Live Video** button to return to the live video view.

This icon in the list designates video clips.
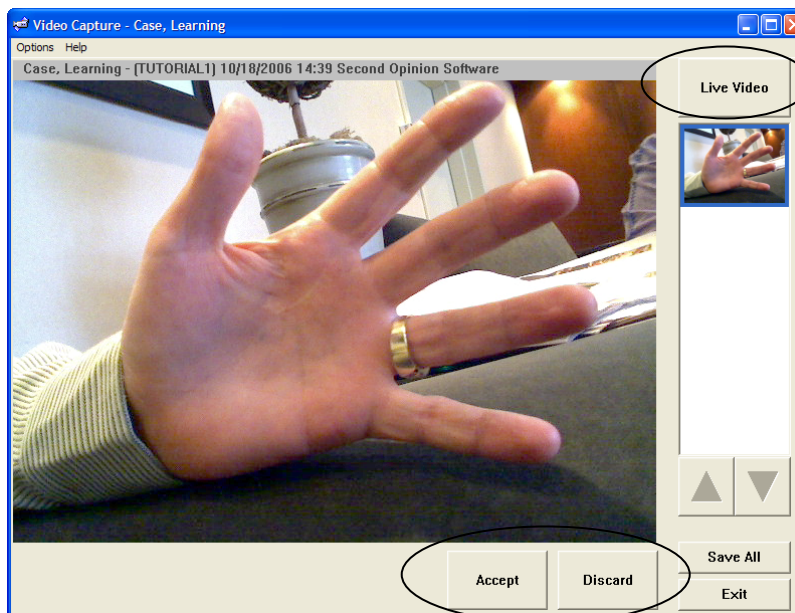
Step 5. Save Captured Stills and Clips

We will save the first captured still into the folder. If you do not save the captured items, they will be lost when you close the video capture application or if you change folders. **Second Opinion** will also ask you if you want to save them before closing.

1. Click on the first captured frame in the list alongside the video window.

2. Click **Accept**.

3. In the **Description** field, type in a description or leave "Still Frame". Descriptions can be up to 30 characters long and can contain spaces. The **Session** field defaults to the current date; it can be changed at this time. Sessions can be up to 35 characters long and can contain spaces.

4. In the **Source** field, select the type of device that originally generated the picture. To add additional Instrument sources go the **Document Manager** window, select **System**, **Preferences,** then click the **Instruments** tab.

5. Type any notes you want in the **Notes** field. Notes can contain multiple lines of text.

6. Click the **Save** button. The image will be saved into the current folder.
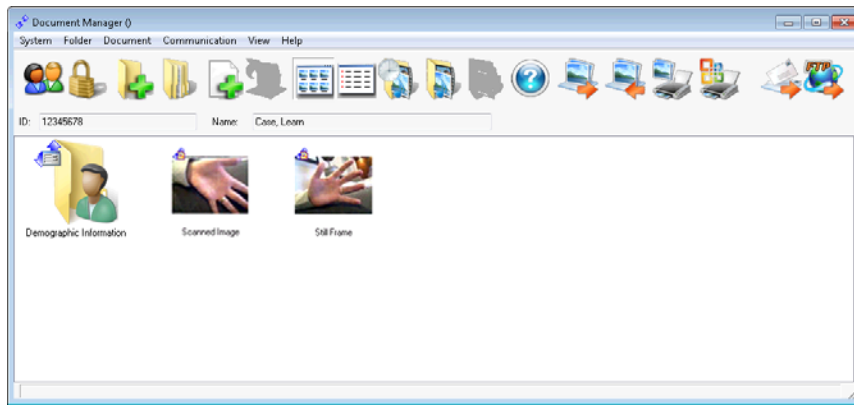
Conclusion

You have completed this lesson and have learned to do the following tasks:

- Capture still video frames using **Document**, **New Document**, **Capture Video** (**Legacy – VFW)**

- Save a captured still video frame into the folder using **Accept**

Adding a Referral Form to a Folder

In the previous lessons of this tutorial you created a folder and added multimedia content to that folder. The last step in creating a complete case folder is adding clinically relevant information to the folder. This information should be relevant history, clinical information, and should include specific questions for the specialist. This is done by adding a **Referral Form** to the folder. After the specialist reviews the case, a **Consultation Form** will be created and sent back.

The **Referral** and **Consultation Forms**, included with the software, are generic forms and can be used in all medical specialties. Customized specialty-specific referral and consultation forms can be created and added to your **Second Opinion Professional** installation.

Another alternative is to create or use an existing paper based referral form, fill it out by hand, and scan it into the patient folder. Refer back to Lesson 3 Scanning Images in this tutorial for instructions on how to scan in a referral form.

Step 1. Create a New Referral Form

All patient folders going out for a consultation by a specialist should contain a **Referral Form** document.

Start a New Referral Form

1. From **Document Manager**, open the **Document** menu and click **New Document…**

You can also click on the **New Document** button.
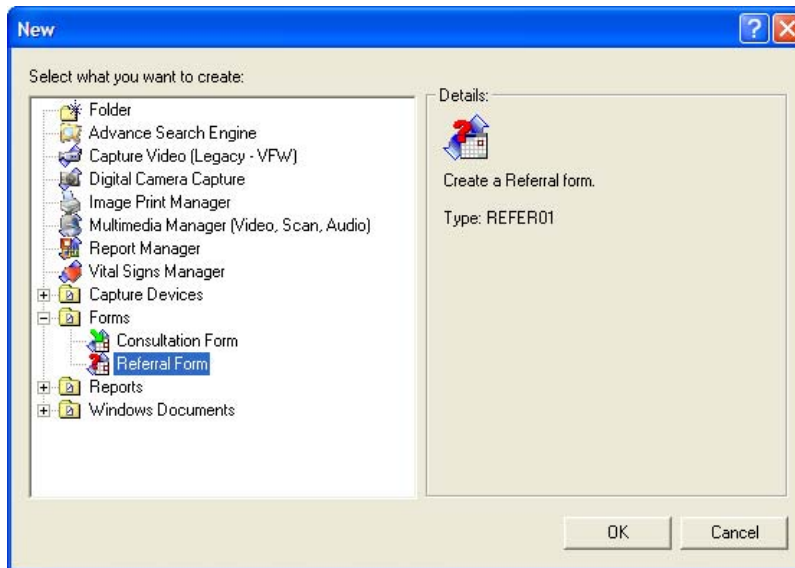
2. Choose the "**Referral Form**" entry in the **Form** section. Notice that a description of that entry appears in the Details section on the right.

3. Click **OK**. This will launch the "**Referral Form**" add-in.

Fill In the Referral Form

Across the top of the Referral Form window there are three tabs: **Clinical Information**, **Referral Information**, and **Specific Questions**.

1. In the **Clinical Information** page, enter a **Ref Date (MM/DD/YYYY)** (referral date) or click the drop-down button and a calendar will appear. The default value is today's date. Press the Tab key to go to the next field.

2. Enter a **Case/Ref #;** the default value is the **Patient ID** (you can enter up to 25 characters in the Case/Ref #). Press the Tab key to go to the next field.

3. Enter a **Country** or choose one from the drop-down list. Press F2 to add values to the **Country** drop-down list.

4. Enter a **Med Dir/Ref By** (Medical Director or Referring Physician), **Phone**, **Fax** and **Email**. This is the contact information of the person or facility responsible for this referral. This is necessary in case there are any questions or additional information or clarification that is needed by the consulting physician. The Med Dir/Ref By, Phone, Fax and E-Mail fields are all related to each other. By selecting a value from the Med Dir/Ref By drop-down list, the related Phone, Fax, and E-Mail values are automatically populated. These values can be changed by simply editing the values. Press F2 to add values to the drop-down list.
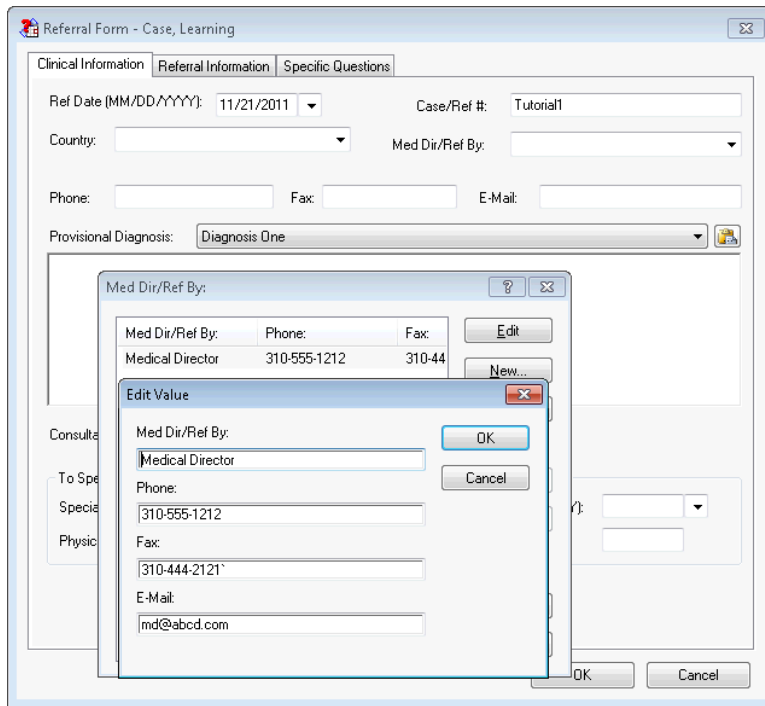
5. Enter a **Provisional Diagnosis** or select relevant description segments from the Provisional Diagnosis drop-down list. Click the **Paste** button to insert selected segments or press F2 and use the Look Up Segment interface to add segments to the form.
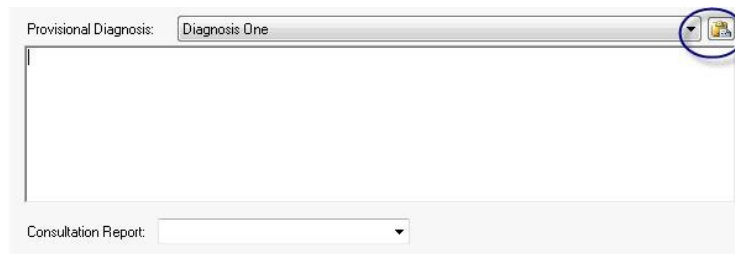
Description Segments are a powerful tool. Often used verbiage can be typed in and referenced as look up values. This allows you to create comprehensive paragraphs by selecting the segments from a list. This minimizes typing and promotes consistency of values.
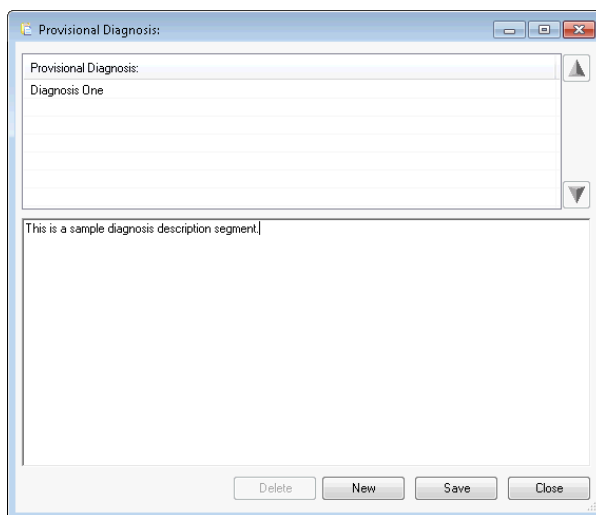
More than one description segment can be selected from the list. The additional segments are added to the **Provisional Diagnosis** field separated by a blank line.

Once you have selected all of the description segments, they can be edited to make up a comprehensive provisional diagnosis.

3. Enter the rest of the information.

4. Click **OK** to close the **Referral Form** and save the entries. The new "Referral Form" document entry is created form the form you just filled in.
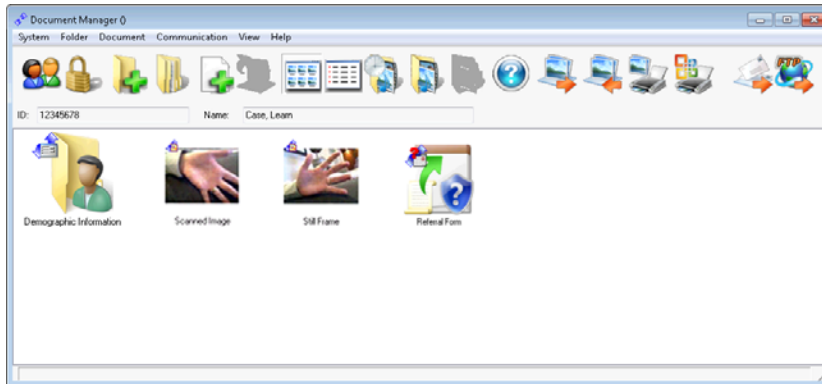
Consultation Side of a Referral

When a **Referral Form** is received by a consulting physician, it can be viewed, and printed but cannot be edited. After reviewing, the referral the consulting physician will create a **Consultation Form.** This returned **Consultation Form** will be linked to the referral.

The **View Consult(s)** button on the **Referral Form** will open up all of the consults that were returned for the particular **Referral Form**.

Conclusion

You have completed this lesson and have learned to do the following tasks:

• Created a new **Referral Form**.

• Learned what Description Segments are and how to add them to a form.

• Learned what a consulting physician does when a referral is received.

Connecting With Other Sites

This Lesson is only valid for computers with Windows XP operating system.

Connecting with other sites in real-time is an important feature of Second Opinion Professional. It allows you to exchange patient information as well as have interactive consultations.

While in a conference you can do a number of different things. First of all you can send Documents and collaborate in real-time with all of the participants. This is a great for "Grand Rounds" and "Peer Review" sessions. Next, data from electronic medical peripherals such as electronic stethoscopes can be transmitted to remote sites for real-time monitoring.

If you have Windows NetMeeting installed, you can utilize these features and establish point-to-point or multi-point conferences over a TCP/IP network such as a local area network (LAN) or the Internet. Using the Internet, you can connect to another computer that is also running Second Opinion Professional anywhere in the world.

In this lesson you will learn to connect to NetMeeting, call a remote computer, answer incoming calls, send documents, and enter into a conference. You must have a properly set up network connection before beginning this lesson. Contact your system administrator if you have any questions or problems with your connection. This lesson assumes you are using NetMeeting version 3.01. The instructions and appearance of the program may change with other versions of NetMeeting.

Before You Begin – Configure NetMeeting

NetMeeting is included with the default installation of the Windows Operating Systems. If NetMeeting is not installed on your computer it can be easily added. Make sure you log in to your computer with administrator rights, click **Start**, click **Run…**, then type in **CONF**, then click **OK**. This will start the NetMeeting configuration wizard.

Before You Begin – Load Sample Patient folder

If you have not already done so, log in to Second Opinion and open up the Sample Patient folder we used in the first lesson. If you need assistance please refer back to Lesson 1 Learning The Basics.

Step 1. Start Windows NetMeeting

Second Opinion must be informed to use Windows NetMeeting. If it is not set up to automatically link to or start NetMeeting, you will need to start it manually.

In **Document Manager**, open the **Communications** menu and click **Start NetMeeting**. If NetMeeting is not already running, it will start. If it is already running, **Second Opinion** will link to it to get conference information.

See the "Using Your Second Opinion Professional" guide for instructions on setting up Second Opinion to work with NetMeeting.

You can also click on the **Start NetMeeting** button.
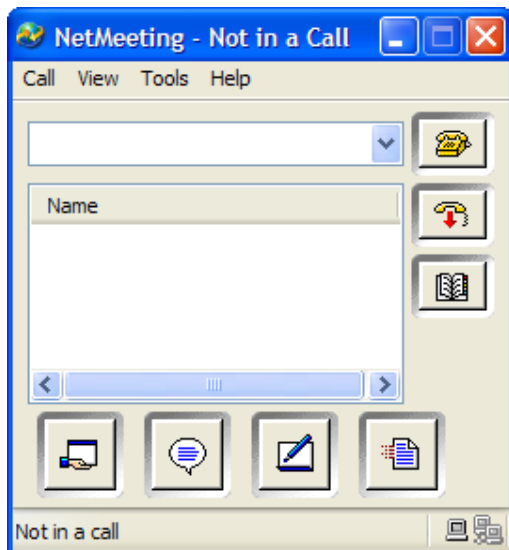
You should also make sure that the computer you will be calling has also started NetMeeting.

Step 2. Call a Remote computer

The details of how you call another computer differ, depending on your network connection. This example will assume you will be dialing the direct IP Address of the remote computer.

Find out the Remote IP Address

If you do not know the remote IP Address, you can ask the remote user to give it to you.

1. Have the remote user click in NetMeeting on **Help**, **About Windows NetMeeting**.

2. Have the remote user read to you the **IP Addresses** entry. It will be a sequence of numbers similar to this: 123.456.789.123.

Call the Remote IP Address

You will need to call that IP Address using NetMeeting.

1. Enter the address given to you by the remote user into NetMeeting.
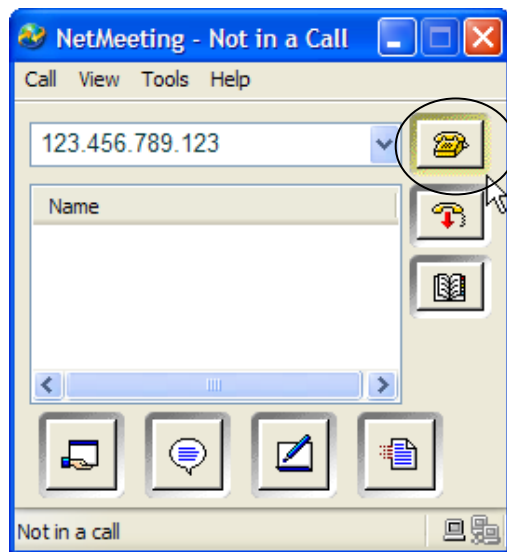
2. Click the **Place Call** button. NetMeeting will connect to the remote computer.

When the conference is established, you will see your name and the name of the remote computer listed in NetMeeting. Second Opinion will also display the number of members in the conference in the Document Manager's Title Bar.
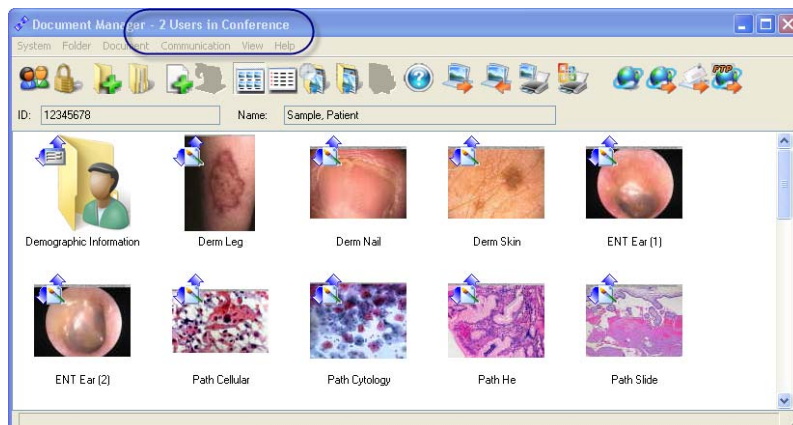
You can establish a multi-point conference, more than two sites, by repeating the **Call the Remote IP Address** steps. The total number of users in a conference will be displayed in the Document Manager's Title Bar.

Step 3. Send a Document from Document Manager

Once the conference has been established, you can send one or more documents to all conference participants in one of two ways; from within **Document Manager** or the **Image Viewer**.

1. Select the document titled "Derm Leg." You can select as many documents as desired.

2. Open the **Communications** Menu, then click **Send Using Conference**.

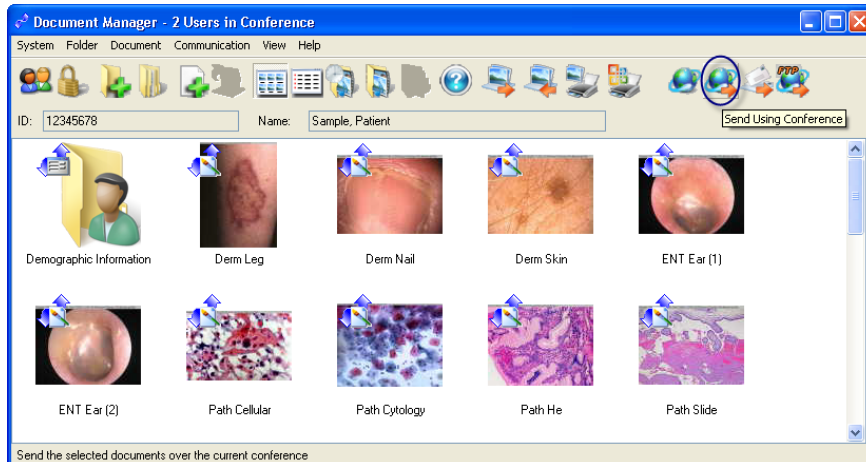You can also use the Send Using Conference button.

When sending documents using this method the program will always send the documents, there is no check to see if the remote site already has the information.

The selected documents and folder information will be collected into an encrypted Second Opinion Data file and will be sent to all other conference participants.

When Second Opinion detects that a remote computer is sending you a file using NetMeeting, it will ask you if you want to import it. The folder contained in the file will become the current active folder and its documents will be imported.

Notice in most cases that the "Demographic Information" document is always sent, even if it was not selected; this is because it stores the primary folder information. The exception is when the default Demographics form has been replaced or is not being at all.

Step 4. Send a document using the Image Viewer

There are several advantages of sending images from the Image Viewer.

1. Select the document titled "Derm Nail" and open it up in the **Image Viewer**.

2. Open the **Communications** Menu, then click **Send Update to All Members**.
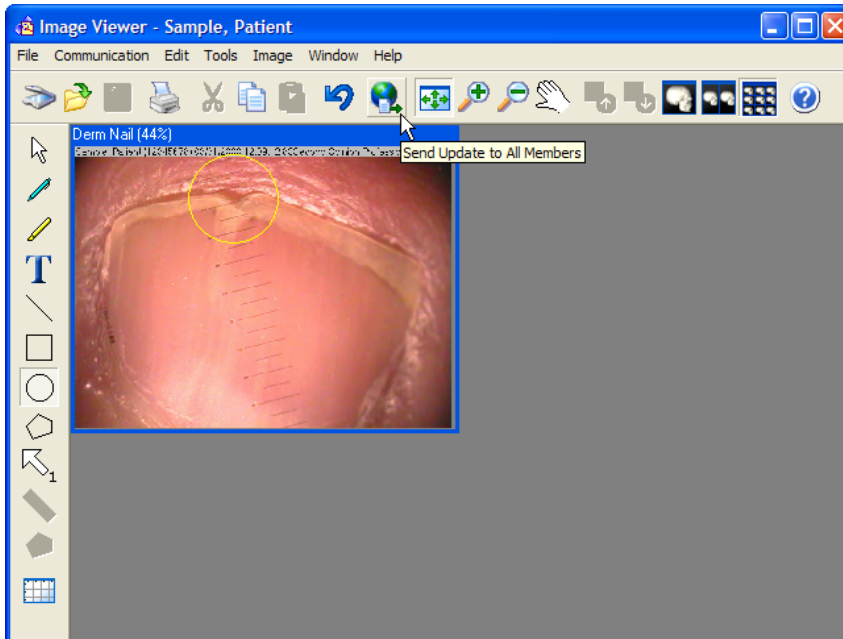
You can also use the Send Update to All Members button.

When sending an image from the Image Viewer, the program will check to see if the remote site has the image and will only send an update to the participants that need it. For the sites that already have the image, it will be opened automatically.

All participants in the conference will now have the "Derm Nail" image open and a collaboration session will be in progress. All actions performed on the image, annotations, location of the image and the zoom factor will be synchronized to all of the connected sites. If multiple images are open, as you select other images, the windows focus will also be updated to all of the participants. This synchronization is not being done via application sharing but rather data conferencing. This means that once the images have been transferred to each site the collaboration band with requirements are minimal. To minimize the amount of conference time spent sending updates to all members, the content to be discussed in "Grand Rounds" and "Peer Review" sessions should be sent ahead of time.

Step 5. Disconnect from a Conference

In NetMeeting, click the **End Call** button.
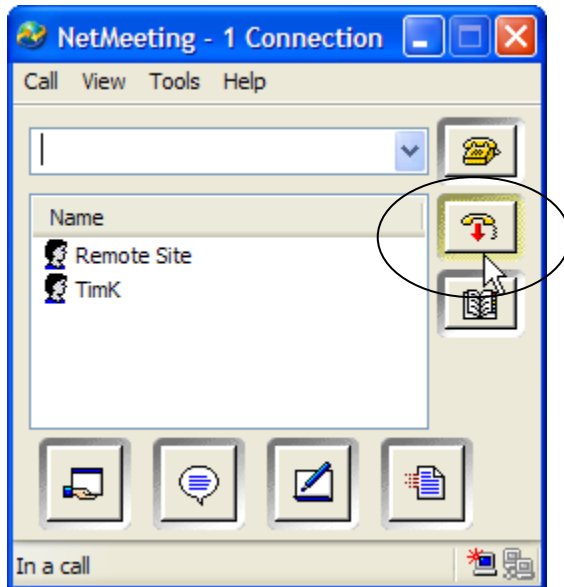
Conclusion

You have completed this lesson and have learned to do the following tasks:

- Start NetMeeting from Second Opinion using **Communications**, **Start NetMeeting**

- Find out a computer's IP Address using NetMeeting's **Help**, **About Windows NetMeeting**

- Call a remote computer using NetMeeting's **Place Call**

- Send documents to conference participants using **Communications**, **Send Using Conference**

- Send images to conference participants from the Image Viewer using **Communications**, **Send Update to All Members**

- Disconnect from a Conference using NetMeeting's **End Call**

Using Email to Send Information

If you have an Internet connection, or are running on a computer network, you can have Second Opinion send documents using email instead of over a real-time conference.

Second Opinion has the capability of sending several documents or images with annotations, comments, patient folder information, and other database information as a single encrypted file attached to your e-mail. If you have a MAPI-compliant (MAPI stands for Mail Application Programming Interface) email client installed, sending email becomes a simple, integrated process.

MS Outlook and GroupWise are examples of MAPI compliant email clients, Outlook Express, AOL, and all web based email clients are not.

This lesson will assume you have Windows XP with Microsoft Outlook running over Microsoft Exchange. If you have a different email system, the details of the procedures may change slightly, but the overall process is the same.

Before You Begin – Configure Email System

Make sure you can successfully create, send, and receive an email using your email client. If you cannot, contact your IT support person to setup and configure your system to do so.

There are no settings in Second Opinion that effect the integration or operation of the email client. All of the settings for the email client are set within the email client or operating system. If the email client is setup properly and is MAPI compliant Second Opinion will integrate with it.
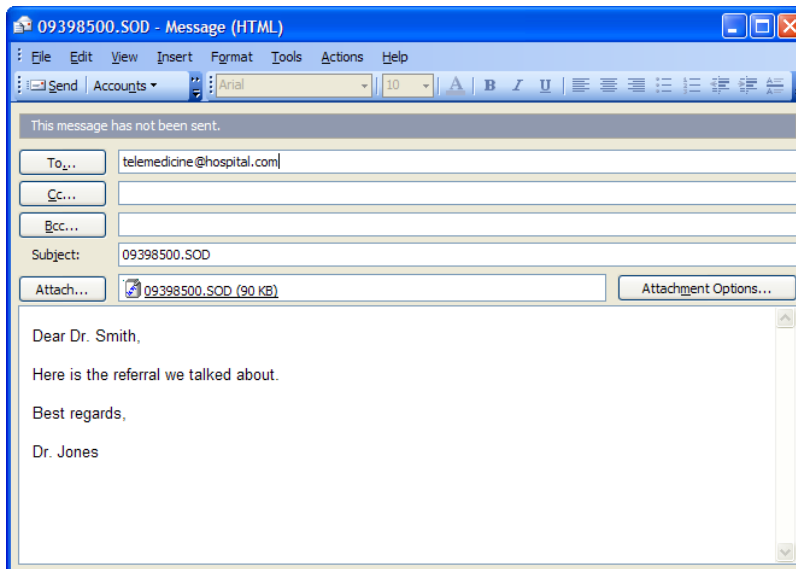
Step 1. Send Documents with a MAPI Client

1. In **Document Manager,** select both the "Scanned Image" and "Video Frame" documents.

2. Open the **Communications** menu and click **Send Using Email…** A dialog box will appear to offer you other options. The selected documents and folder information will be collected and processed into an encrypted **Second Opinion Data** file.

Send Using Email button
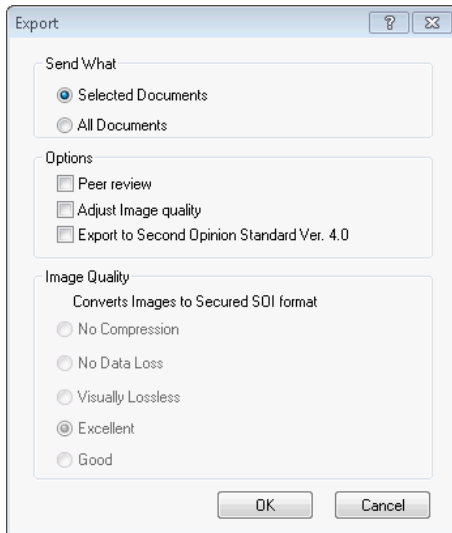
3. If a MAPI compliant email client is installed, you will see a mail message dialog box with a uniquely named .SOD file as the attachment. Type any message you wish, choose one or more recipients, and click **Send**.

The text message portion of the email is NOT encrypted, only the information in the attached .SOD file is. Do not put confidential patient information in the body of the email message.

Step 1a. Send Documents with a Non-MAPI Client

1. In **Document Manager**, select both the "Scanned Image" and "Video Frame" documents.

2. Open the **Folder** menu and click **Export Folder…** The same dialog box will appear as when clicking the **Send Using Email** button. The documents and folder information will be collected and processed into an encrypted **Second Opinion Data** file but, instead of the program automatically attaching it to the outgoing email, you will need to save it in a temporary location so it can be manually attached to the outgoing email.

3. Compose an email message using your email client, address it, attached the SOD file to the email, and click send.

Step 2. Receive Documents

If you receive an email message with an .SOD file as an attachment, you can import the attachment into **Second Opinion** in one of several ways, depending on what your email client supports.

1. Have a remote computer running **Second Opinion Professional** e-mail you one or more documents.

2. Look through your mail system's **In Box** for the message.
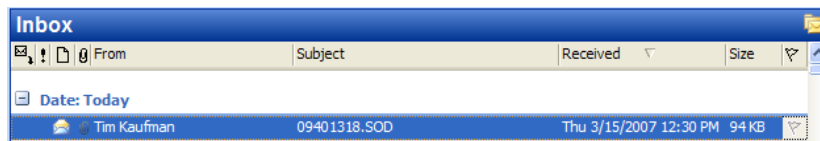
3. Double-click on the message entry. This should display the contents of the message.
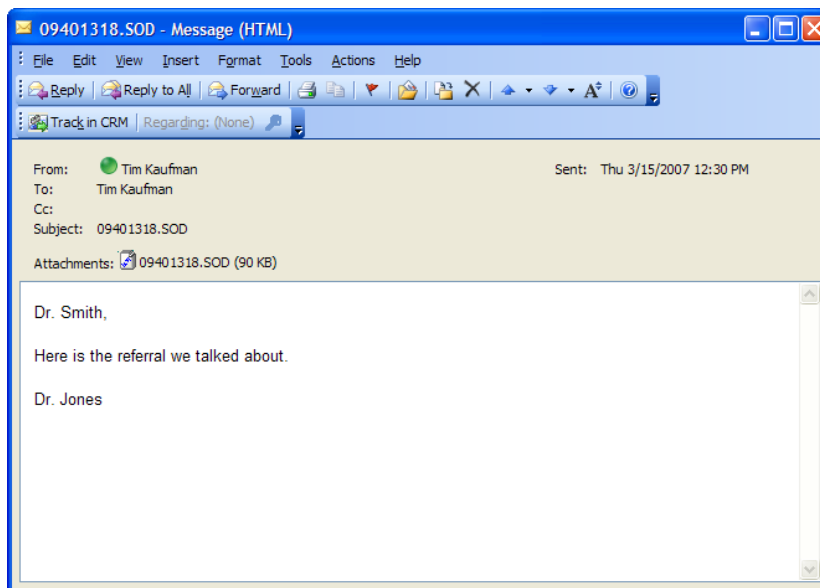
4. Double-click on the icon for the attached file. If you are asked what you would like to do with this file, choose **Open it**.

5. If Second Opinion Professional is not already running, it will automatically start. If no user is logged in, you will be asked to log in.

6. The folder information contained in the attachment will be created or updated as necessary, and all of the documents in the attachment will also be updated or created as necessary. Second Opinion ensures that only older information is replaced by newer information.

Conclusion

You have completed this lesson and have learned to do the following tasks:

- Send documents using a MAPI compliant email client, **Communications**, **Send Using Email**

- Send documents using a Non-MAPI compliant email client, **Folder**, **Export Folder**

- Open received documents

Using FTP to Send Information

If you have an Internet connection, you can have Second Opinion send documents using FTP (internet File Transfer Protocol) instead of over a real-time conference or Email.

Second Opinion has the capability of uploading several documents or images with annotations, comments, patient folder information, and other database information as a single encrypted file. There are times when the attached encrypted file is too large to send via Email or you do not have a valid email client set up on the computer, you can send the information via FTP Send. Using this feature, the SOD file is uploaded to a secured server via the FTP protocol, once it is uploaded, an email with a link to the encrypted file is sent to the recipient. The recipient clicks on the link to download the file and import it into Second Opinion.

This lesson will assume you have Windows XP or Windows 7 with an internet connection.

## *Step 1. Send Documents using FTP Send*

1. In **Document Manager**, select both the "Scanned Image" and "Video Frame" documents.

2. Open the **Communications** menu and click **Send Using FTP…** A dialog box will appear to offer you other options. The selected documents and folder information will be collected and processed into an encrypted **Second Opinion Data** file.

Send Using FTP button
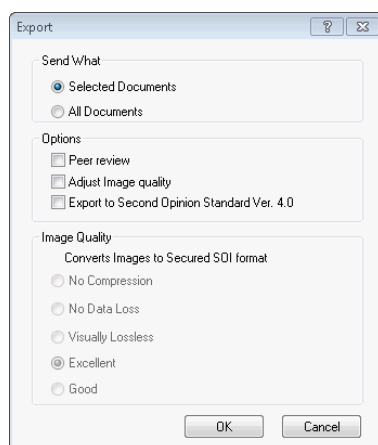
3. Fill in all of the appropriate information in the FTPSend form. You must specify the To and From Email addresses. The Save My Info button saves the information you have entered as default values and will not need to be entered next time. Type any message you wish and click **Send**.
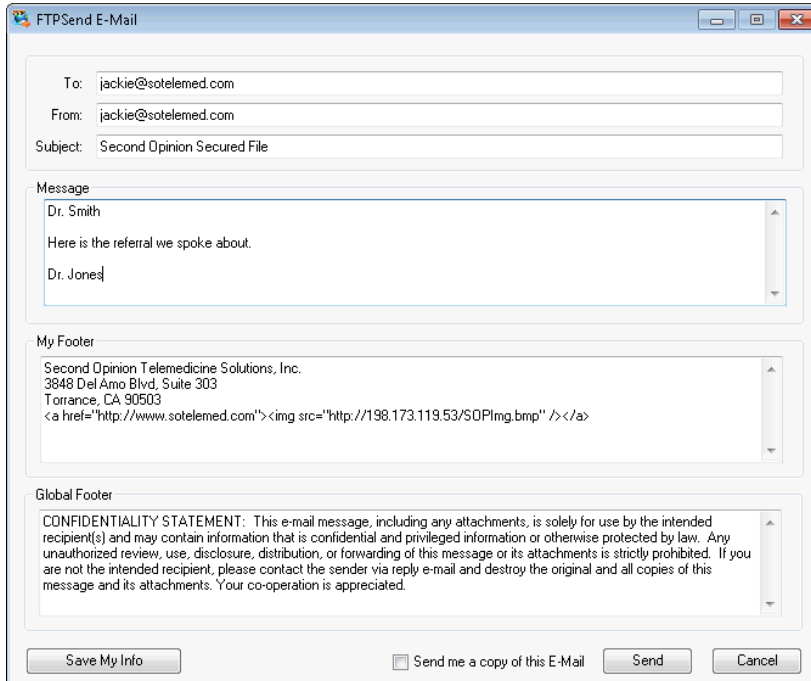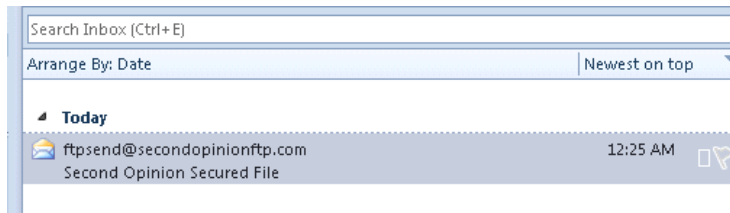

4. You will see a FTP Send Status box indicating the file is being uploaded. When complete, an email with a link to the file, will be sent.
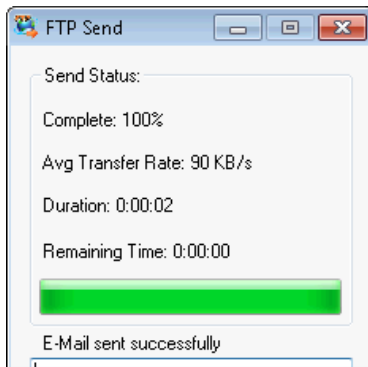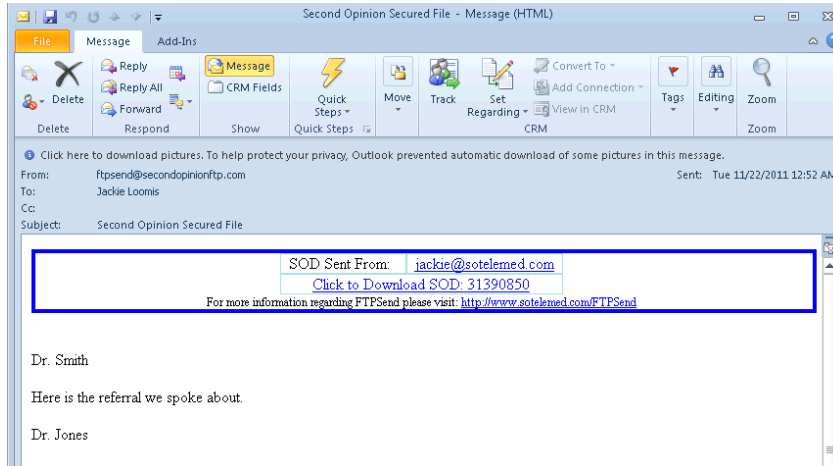

Step 2. Receive Documents

1. Have a remote computer running **Second Opinion Professional,** send one or more documents using FTP Send.

2. Look through your mail system's **In Box** for the message.

3. Double-click on the message entry. This should display the contents of the message.

4. Click on the *Click to Download* link. If you are asked what you would like to do with this file, choose **Open it**.

5. If Second Opinion Professional is not already running, it will automatically start. If no user is logged in, you will be asked to log in.

6. The folder information contained in the FTP link will be created or updated as necessary, and all of the documents will also be updated or created as necessary. Second Opinion ensures that only older information is replaced by newer information.

Conclusion

You have completed this lesson and have learned to do the following tasks:

- Send documents using FTP Send, **Communications**, **Send Using FTP.**

- Open received documents

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