

iViews Database Manager Users Guide

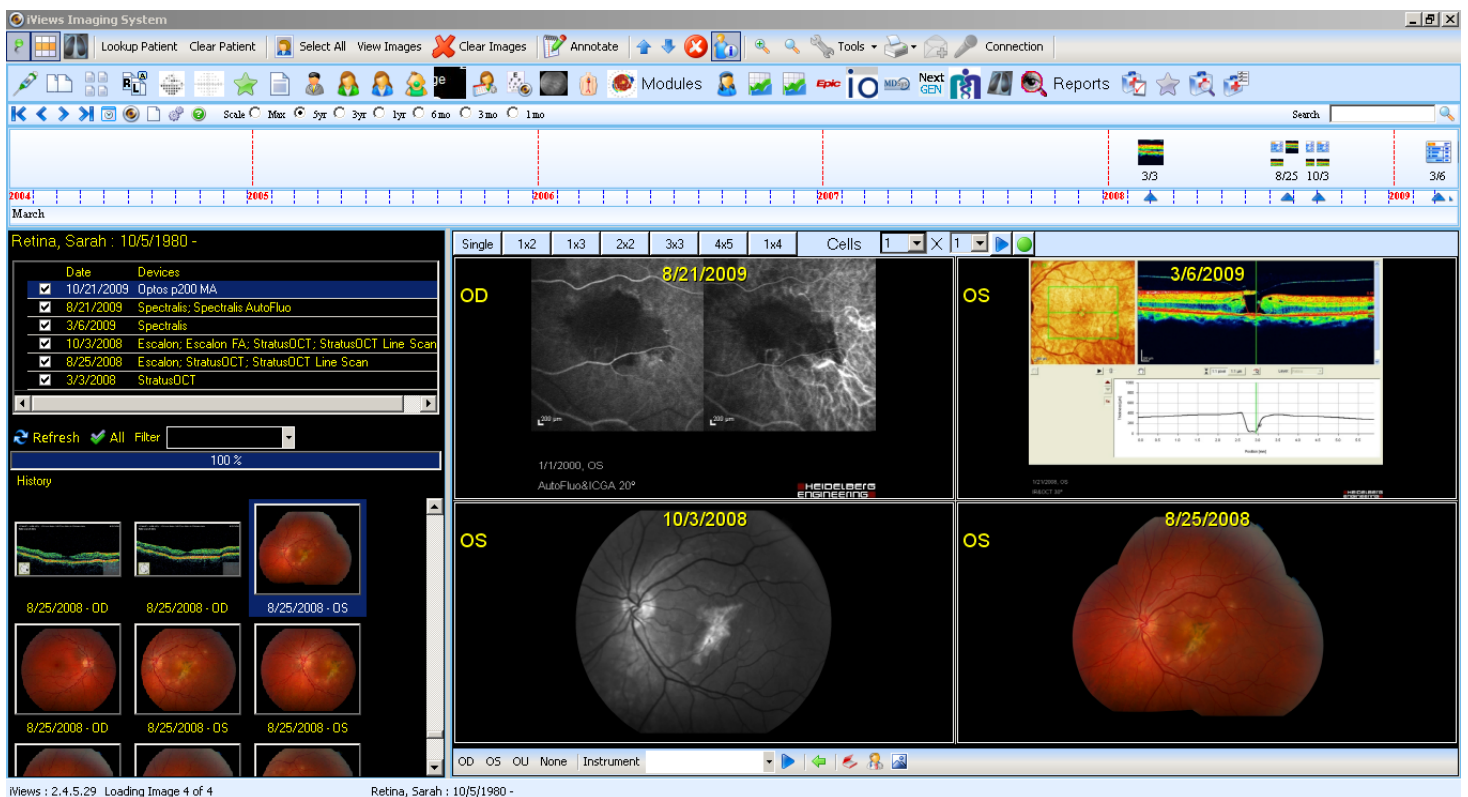


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iViews Database

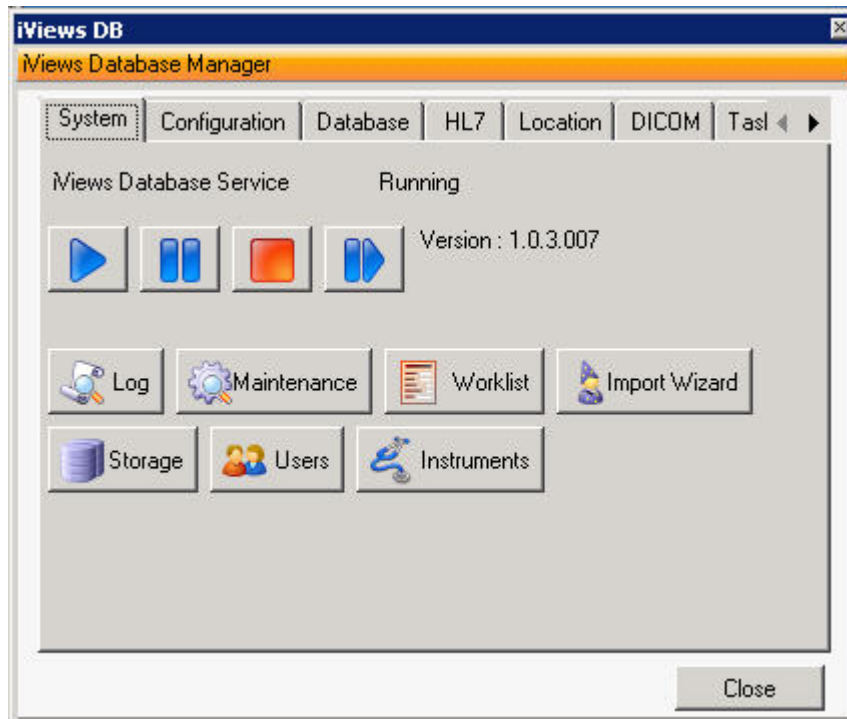
Introduction

The iViews Database manager is the direct interface between the user and the database. This tool allows you easy access to your data with a user friendly interface. It holds many tools that allow you to modify, maintain, and update your database. iViews Database Manager allows you to pull up the real time processing log of images as they move through your system.

iViews Database Manager







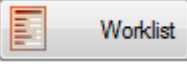
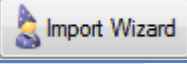



Overview

The iViews Database Manager is a small windows application that acts as the interface between the automated DICOM Processing system and the user. It is mostly an administration tool that allows the users access to the windows service and the database. The following shows the iViews Database manager:



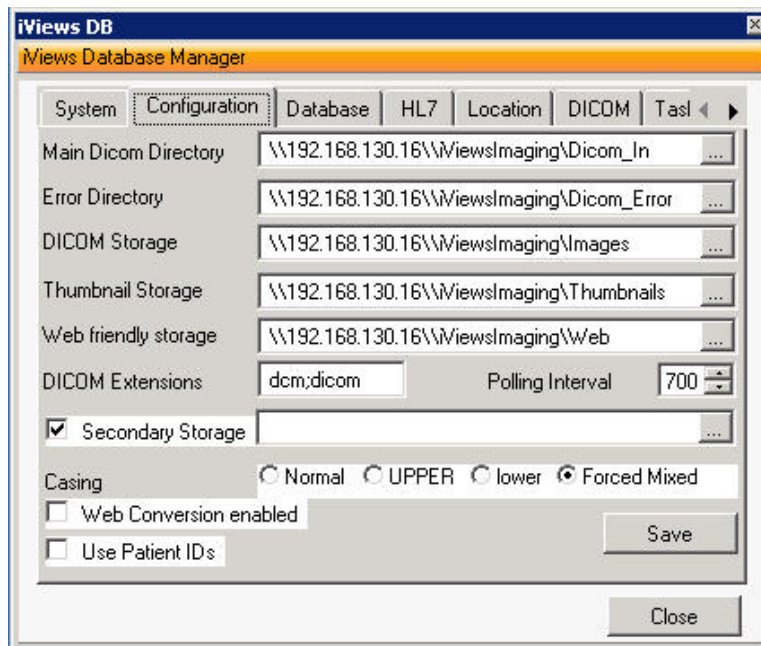
System

The following lists the main functions of the iViews Database manager

Tool	Description
iViews Database Service Running	This is the service status. The typical values are Running and Stopped; however, you may see intermediate state values depending upon the notification intervals of your system.
iViews Database Service Stopped	
	Starts the service
	Pauses the service Note: this is not typically used
	Stops the service
	Restarts the service
Version : 1.0.1.017	The software version of the service
In addition to the service tools there are several utilities that may be accessed as well. These are listed below:	
	Displays the processing log
	Displays the database management utility. Please note: this utility is quite lengthy and has a very thorough description in the next section
	Display the work list. Please note: this feature is not enabled by default as it depends upon which EMR vendor has been chosen for integration
	Displays the Import Wizard
	Displays the Storage utility.
	Displays the Users Management utility.
	Displays the Instruments Assignment list utility.

Configuration

The configuration tab contains the elements needed to configure the service for operation. The form is shown below followed by an explanation of each parameter.



Parameter	Description
Main Dicom Directory	The main “inbox” for the dicom processing. Similar to C:\eis\d2db_in
Error Directory	The directory for processing errors. Only severe errors will be placed here. Such as unrecognized files or duplicate SOP instance IDs. Correctly processed images will not be placed here.
DICOM Storage	The main folder to store the dicoms. Currently it’s a single directory, but the next release will have this as a parent/child tree structure for better file indexing
Thumbnail Storage	The folder to store thumbnails
Web friendly Storage	The folder to store web friendly versions of the dicoms images
DICOM Extentions	Valid Dicom extensions .Should almost always be : dcm;dicom
Polling Interval	The number of seconds to wait for processing the directory again. Please note: unlike other dicom processing services that need fast processing, please keep this number above 10 seconds. So that imaging memory may have time to clear.
Connection String	Connection String for the SQL Server to use. Since this is a server based install, integrated security may be used; however, general authentication is recommended.
Web Conversion Enabled	Checked to create web friendly files Unchecked to bypass web friendly conversions (Recommended if no web based solutions are in place)
Secondary Storage	This is used as a secondary storage point for images
Save	Saves the configuration – Note: changes require a service restart

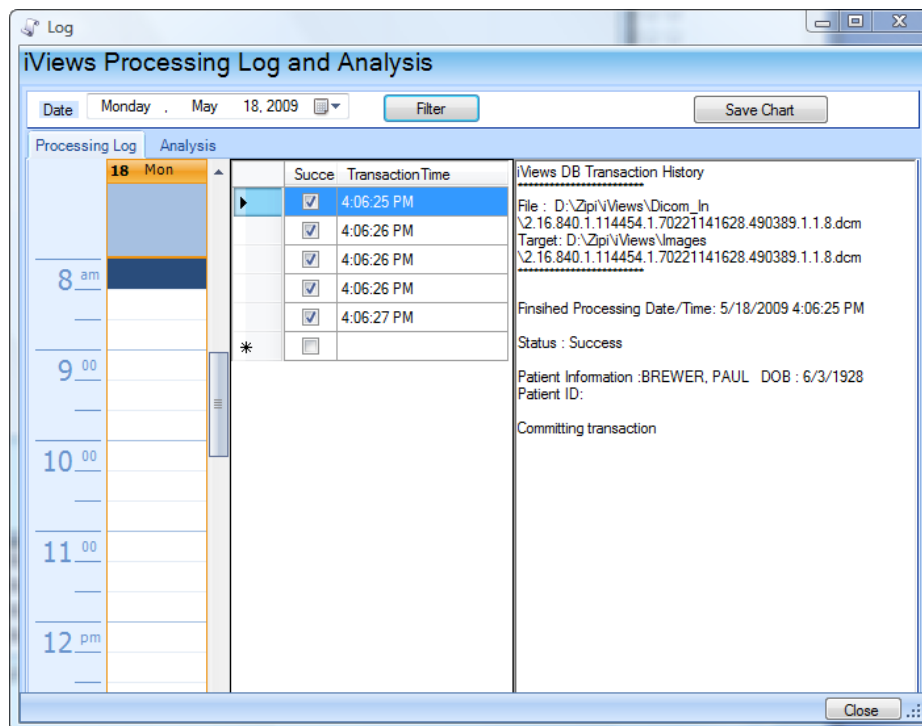
iViews Database Log

Overview

The log utility displays a list of all image transactions. Whether this is a success or an error, the log contains this information. This log only contains messages pertaining to image data, any service events are recorded in the system log. The following shows the iViews Processing log:

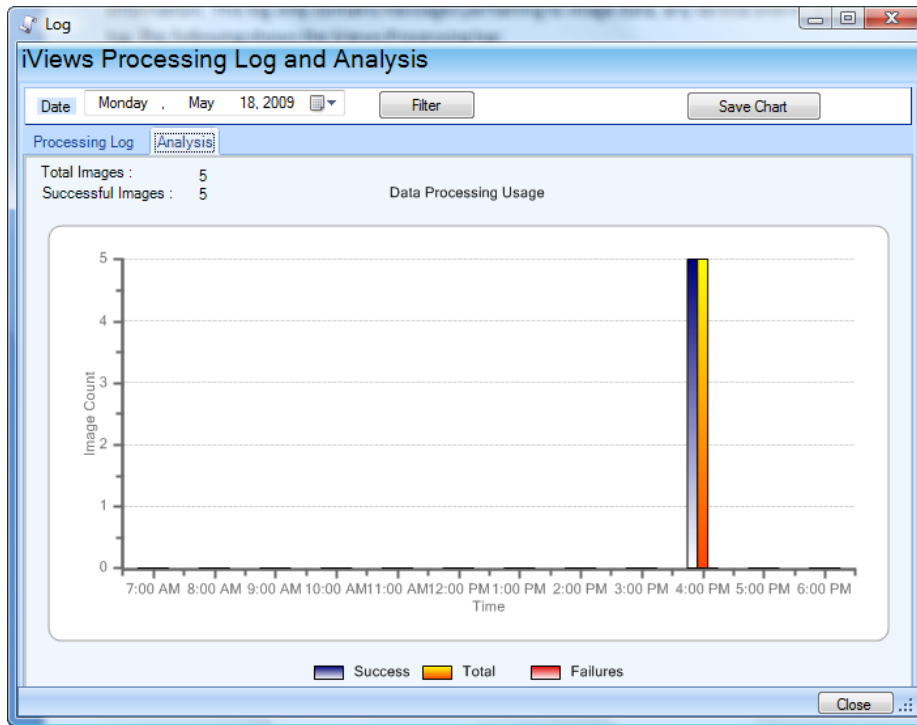
By changing the date from the date drop down box and pressing “Filter”, you can filter your results to display logs from different dates.

Processing Log



This view lists all transactions for the specified date. The details of the transaction are displayed next to it. A check represents a successfully processed image.

Analysis



The analysis tabs shows a graphical representation of the processing broken down by time. By clicking on Save Chart, you can save a copy of the chart. The currently support image format is JPEG.


iViews Data Management Utility

Overview

The iViews Data Management utility is a very robust application that allows you to manage your data. Not only does it allow you to perform typical database needs, but it also allows gives you a set of DICOM tools for all of the imagery. From this screen you can manage the entire database, inspect DICOM properties, adjust image classification and convergence, and even extract DICOM data from other databases.

Starting the iViews Database Manager

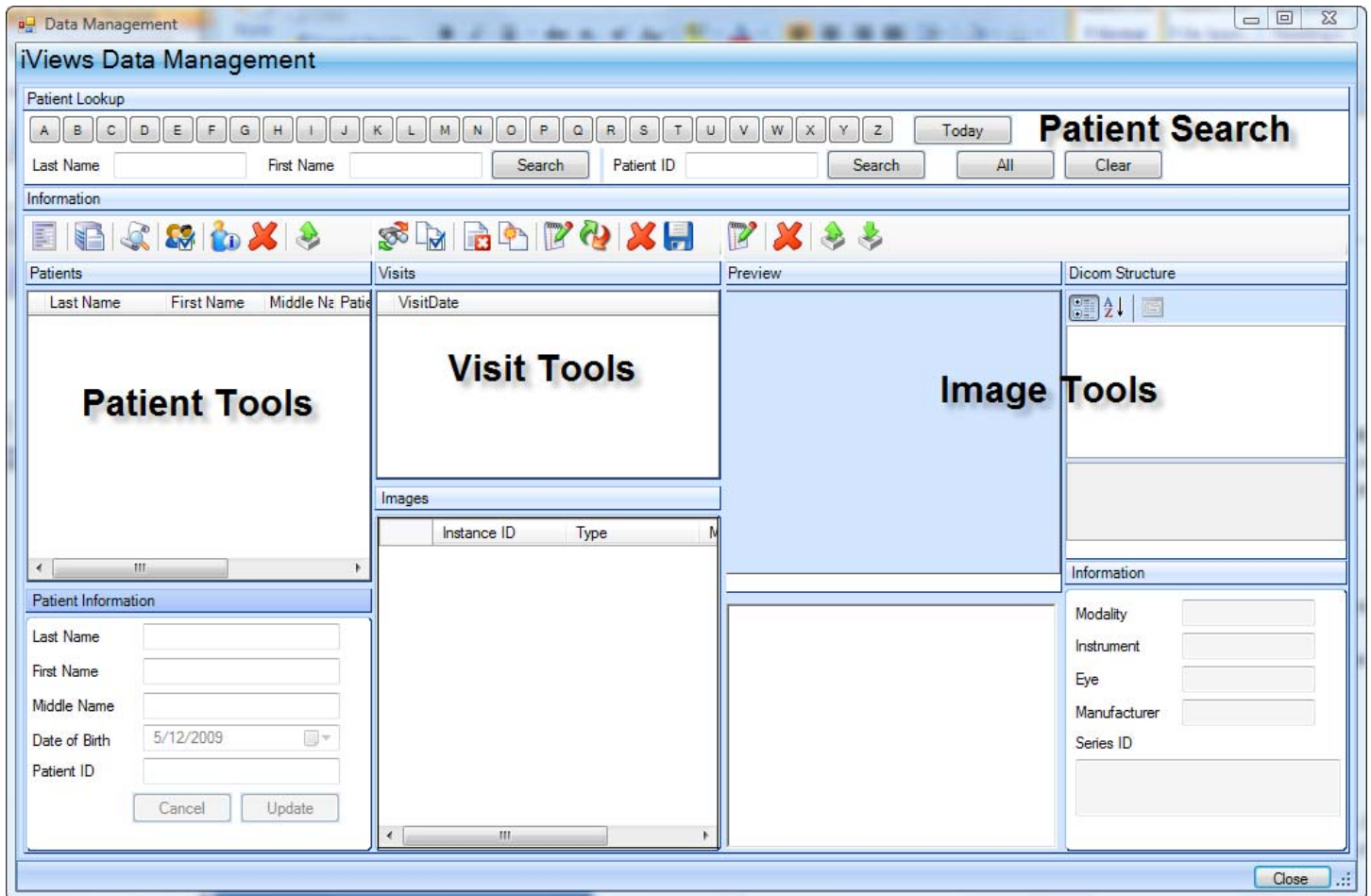
From the main iViews Database Manager window, Press the Maintenance button to launch the iViews Data

Manangement utility.  . The database that is currently configured will be the database that is to be managed.

Breakdown of Management Sections

Upon first looking at the management utility, it may seem a bit overwhelming. However, there is a structure to the design that is based upon four sections and you will recognize that there are sets of tools tailored for each section. These sections are:

- 1) Patient Search
- 2) Patient Tools
- 3) Visit Tools
- 4) Image tools



iViews Data Management Main Screen

Patient Search

Patient Lookup																										
A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Today
Last Name				First Name				Search		Patient ID				Search		All		Clear								

This is the starting point for the management tool; simply select any of the available criteria. The currently available search options are :

- 1) Today – Retrieves a patient list for today
- 2) Name lookup – Looks up a patient by name
 - a. Either click the alphabet bar for a quick last name lookup by matching the first letter of the last name
 - b. Provide patient name information
- 3) Patient ID – Provide a specific patient ID
- 4) All – Retrieves all patients (**Please note:** *in large databases this could be a lengthy process*)

The other option is to clear the search results.

Patient Tools

There are three sections to the patient tools:

The screenshot shows a software interface for patient management. At the top is a toolbar with icons for a list, a folder, a magnifying glass, two people, a person with an 'i', a red 'X', and a green folder. Below the toolbar is a window titled 'Patients' containing a table with columns for 'Last Name', 'First Name', and 'Middle Name'. The table is currently empty. Below the table is a section titled 'Patient Information' with input fields for 'Last Name', 'First Name', 'Middle Name', 'Date of Birth' (with a calendar icon and the value '5/12/2009'), and 'Patient ID'. At the bottom of this section are 'Cancel' and 'Update' buttons.

1) Patient Toolbar

This provides the tools necessary for patient level functions. Additionally, there are 3 system level tools located here








2) Patient Search Results

This is the list of patients returned from the query selections made in patient search.

3) Patient Information

This section displays a quick summary of the patient. These fields are enabled during a patient edit.

Summary of tools

Tool	Description	Category
	Displays the patient work list	System Tool
	Displays the image queue manager – Note : this is an add on feature	System Tool
	Displays the log	System Tool
	Merge two patients	Patient Tool
	Edit Patient Information	Patient Tool
	Deletes the current patient	Patient Tool
	Export Patient Images – Launches a utility to export patient images for a specified date period	Patient Tool

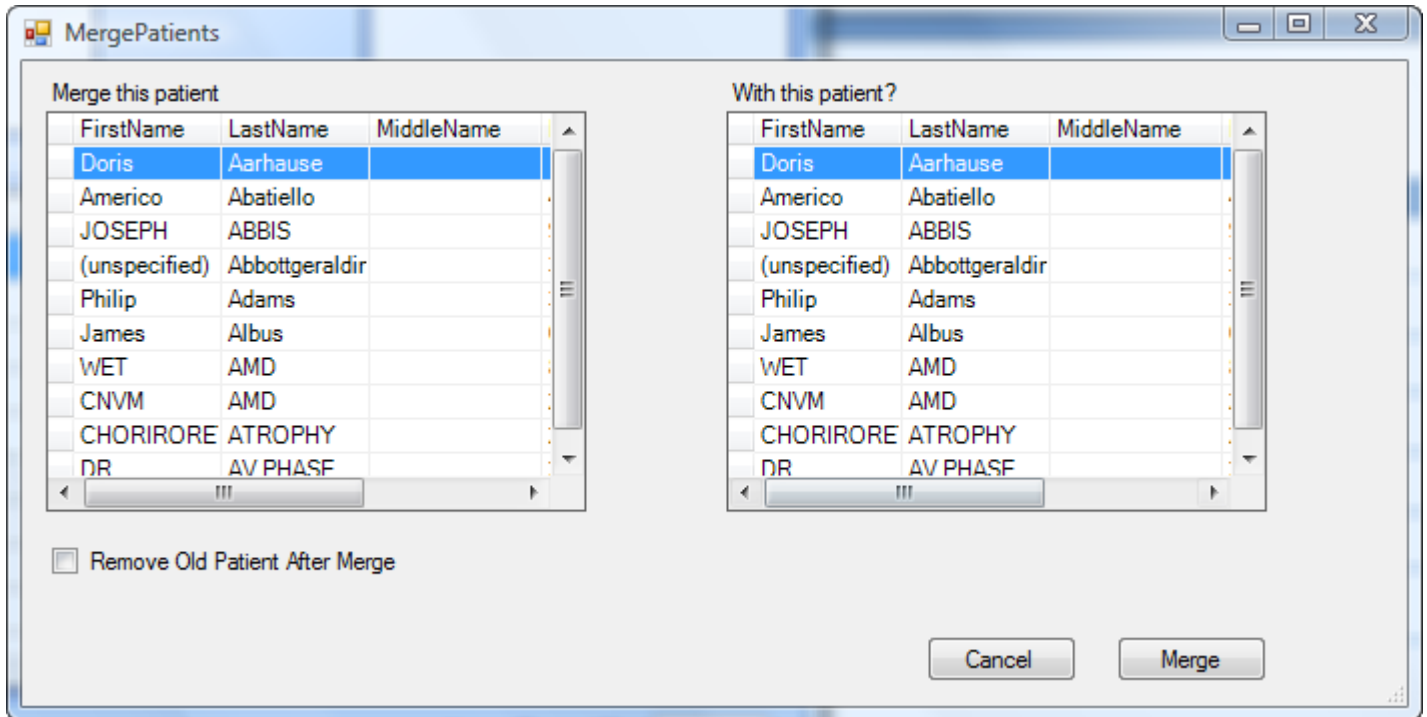
Merge two Patients

You may merge the data from one patient to another by using this tool.

An example of when this tool may be needed is when a user has misspelled a patient name on several devices. Several devices are correct, and some may be incorrect. A patient named Smith, John may appear as Smith, John or Smith, Jon; but in reality they are the same patient. Using this tool you can merge the records.

Once you have selected to merge the patients, another utility window is displayed. This window uses the current patient result set, since most of the time the merger is needed because of small misspellings, this keeps it simple and fast.

Below is the utility window for merging two patients:

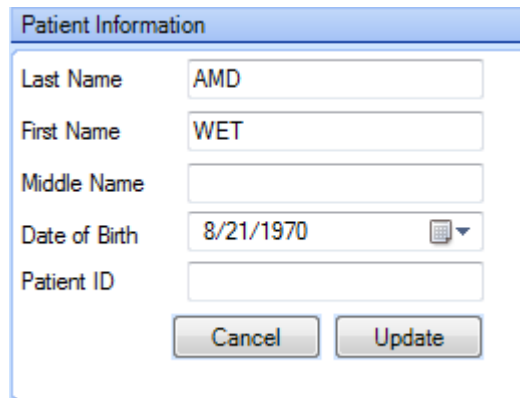


To Merge the patients follow these steps

- 1) Select the first patient, this is the patient that contains data that is in the wrong location.
- 2) Select the second patient, this is the patient that will receive the records.
- 3) Choose to remove the old patient after the merger. Check this to remove the patient.
- 4) Either Merge or Cancel and the task is complete.

Edit Patient Information

You may edit the patient information by using this tool. There is no additional utility window and the changes are made on the main screen.



Patient Information

Last Name: AMD

First Name: WET

Middle Name:

Date of Birth: 8/21/1970

Patient ID:

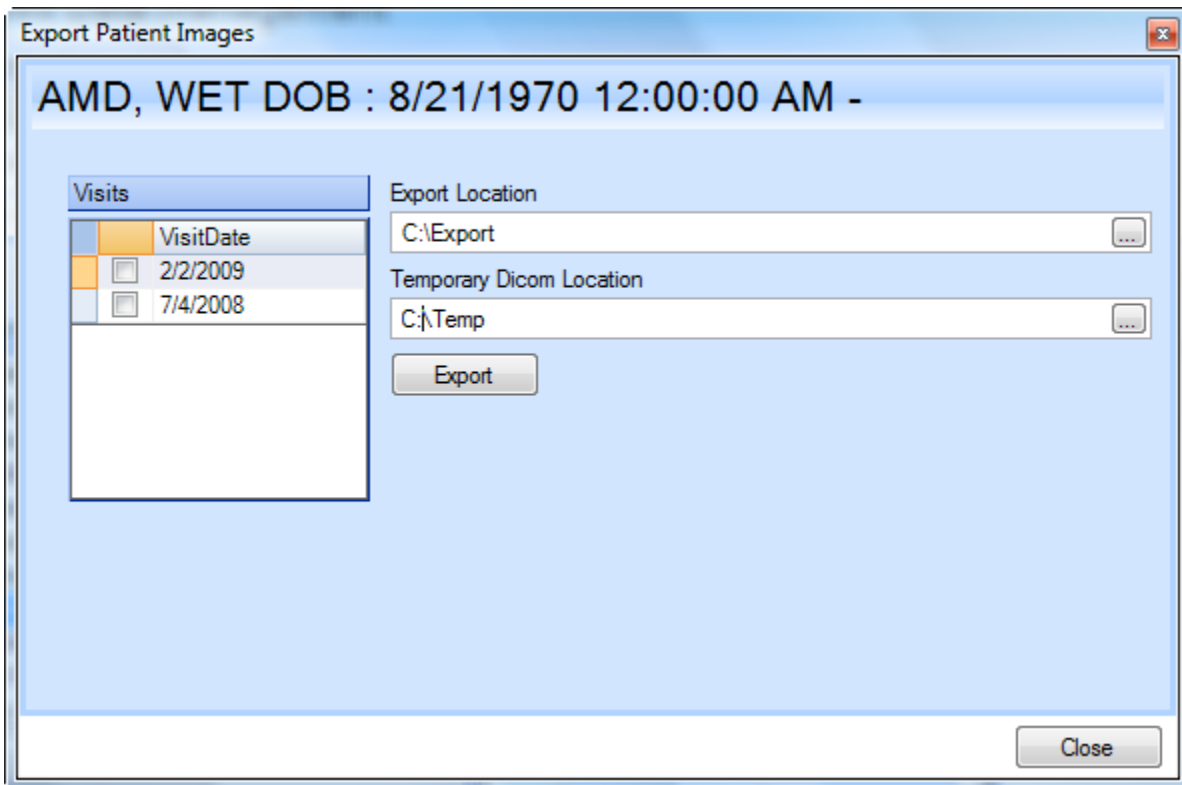
Cancel Update

After selecting to edit the patient, simply update the appropriate fields and either select “Update” to save the changes or cancel to cancel the changes. The following table describes the sections for editing:

Field	Description
Last Name	The Patient’s Last Name
First Name	The Patient’s First Name
Middle Name	The Patient’s Middle Name
Date of Birth	The Date of Birth of the Patient
Patient ID	The Patient ID for the Patient
Cancel	Cancels any changes
Update	Saves the changes to the database

Exporting Patient Images

By selecting to export patient images, you can specify by date which images you would like to export. The utility is shown below :



The steps are as follows:

- 1) Select which dates to export for the patient
- 2) Specify a location to export the files
- 3) Specify a temporary location to hold the data
- 4) Click Export to export the patient images.


This concludes the Patient Tools documentation

Visit Tools

Summary of Tools

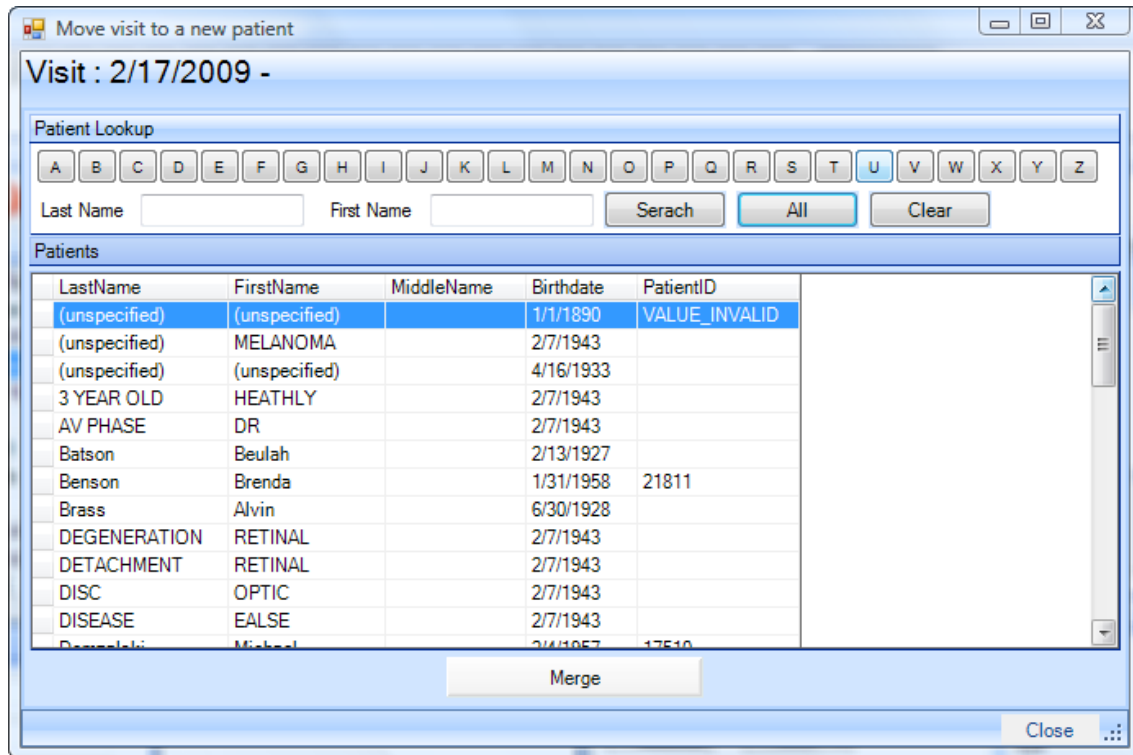
The Visit tools are shown below and the following table summarizes their usage:




Tool	Description
	Move Visit to a new patient
	Merge Visits
	Delete Visits
	Create New Visit
	Update Image Information
	Move Images to another visits
	Export DICOMs by Date

Move Visit to a New Patient


This utility will allow you to move visits to a new patient. This is often useful if an end user has entered the wrong date for an examination. As a result, the data is not established correctly for the date of service. Using this tool, you can correct this error. The following figure shows the Move visit utility screen.



Steps to merge a visit:

- 1) The current visit will be displayed in the Title
- 2) Search for a patient using the available search tools.
- 3) Select the appropriate patient
- 4) Press Merge – 
- 5) You will be asked to confirm if you wish to merge the patients.
- 6) Once you confirm the operation, the utility will close.

To Cancel:

- 1) Simply close the window – 

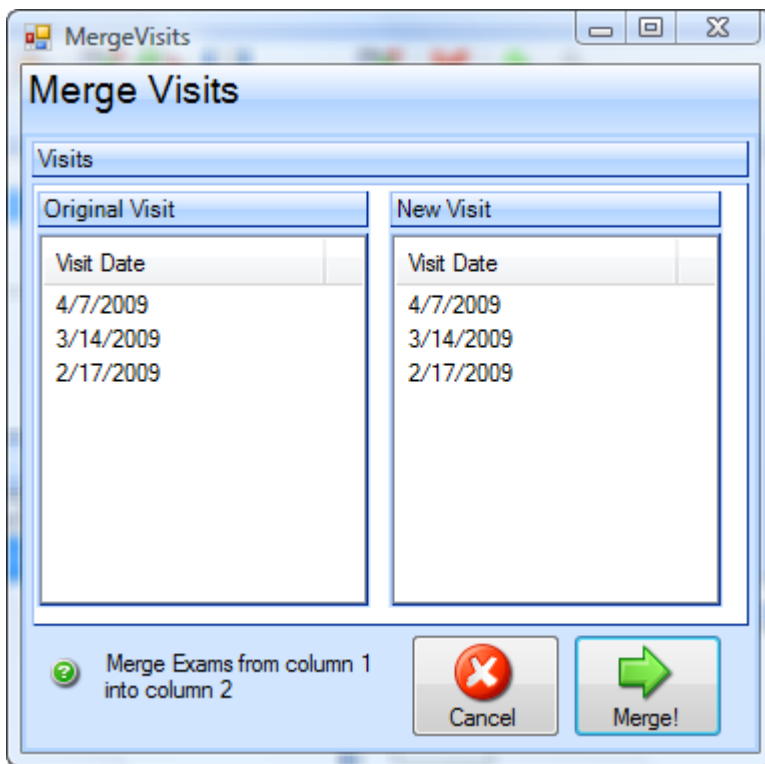
Merge Visits

This utility will allow you to merge two visits together. It only applies for the current patient and will not perform a cross visit operation.

Please note: This utility will not load unless there are multiple visits listed. It stands to reason that you cannot merge visits if the patient only has one visit.

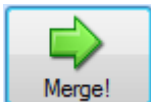
If the patient only has one visit and it is incorrect, you will need to create a new visit for this patient prior to running this utility. See the section “Creating a new visit” for instruction.

The following figure shows the Merge Patient Utility:



Steps to Merge Visits:

- 1) Select the original visit date
- 2) Select the new visit date
- 3) Press Merge to merge the visits :

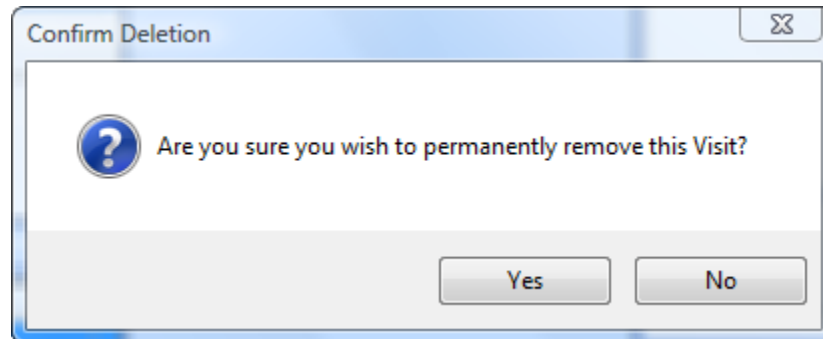


- 4) Or press Cancel to cancel the utility



Delete Visit

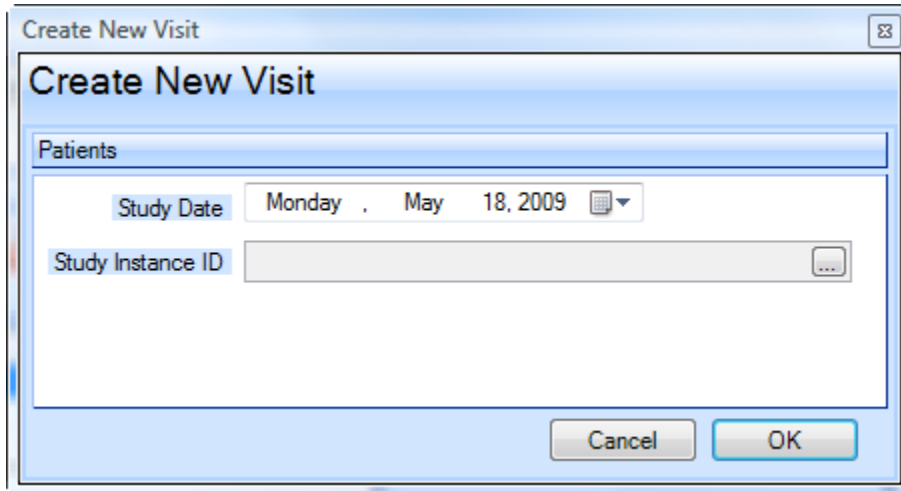
By pressing the delete visit button you will be prompted with a confirmation dialog. There is no utility screen for this function. Answering yes will delete the visits while selecting no will cancel the delete operation. The following is the confirmation form:



Create New Visit

At times you may need to create a new visit for the patient, this often happens when data that was submitted has the wrong examination date on the instrument.

When you select the create new visit button, the following utility screen will be shown:



Steps to create a New Visit:

- 1) Select the date that is needed
- 2) Optionally, adjust the Study Instance ID. This will be generated automatically; however, you may adjust it if the option is available.


Please Note: a study instance ID is no longer required as any merged data will inherit its original DICOM Properties

- 3) Select OK to create the new visit, otherwise, select cancel to cancel the utility.

You will now see a new visit in the visit table:

Before	After											
<table border="1"><thead><tr><th>Visits</th></tr></thead><tbody><tr><td>VisitDate</td></tr><tr><td>4/7/2009</td></tr><tr><td>3/14/2009</td></tr><tr><td>2/17/2009</td></tr></tbody></table>	Visits	VisitDate	4/7/2009	3/14/2009	2/17/2009	<table border="1"><thead><tr><th>Visits</th></tr></thead><tbody><tr><td>VisitDate</td></tr><tr><td>5/18/2009</td></tr><tr><td>4/7/2009</td></tr><tr><td>3/14/2009</td></tr><tr><td>2/17/2009</td></tr></tbody></table>	Visits	VisitDate	5/18/2009	4/7/2009	3/14/2009	2/17/2009
Visits												
VisitDate												
4/7/2009												
3/14/2009												
2/17/2009												
Visits												
VisitDate												
5/18/2009												
4/7/2009												
3/14/2009												
2/17/2009												

Update Image Information

By selecting the following button from the visits toolbar  in the database management utility, you will launch the Image Update Sheet. From here you may delete or update the image and its metadata.

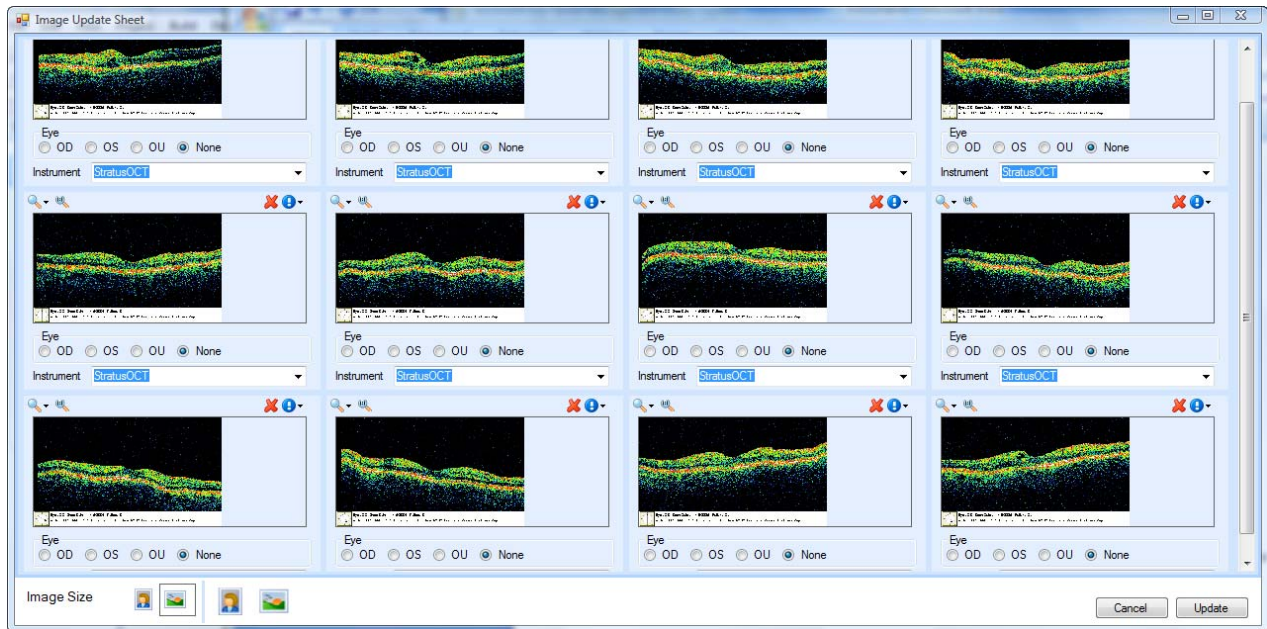
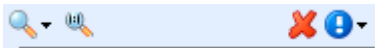






Image toolbar:



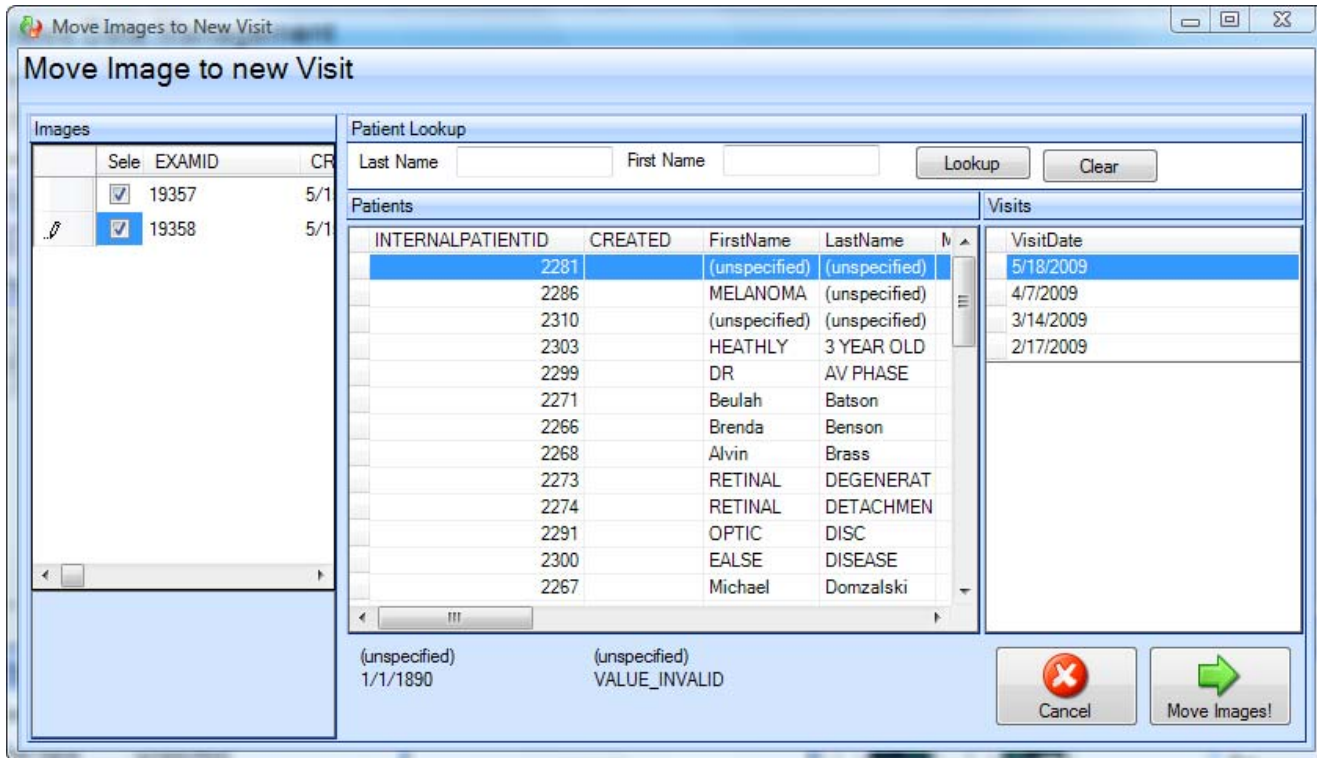
Button	Description
	Displays Viewing options
	Allows the user to “draw” the region to zoom upon
	Marks the image for deletion – Note: the image background will turn red.
	Displays DICOM Information

Options

Option	Description
Eye	Allows the user to specify which Eye
Instrument	Allows the user to specify the instrument

Move Images to another visits

You may move individual images to another patient by using the “Move Images to another visit” utility. By selecting this tool, you will then see the following utility screen:



By default, the current search results are pre-loaded into the Patient list. This is typically helpful because usually the end-user has already done a specific lookup, so the search results are narrowed.

This utility is often used when there is a small misspelling of a name or an end user has accidentally assigned an image to the wrong patient.

Steps to move images:

- 1) Select the images to move by checking them
- 2) Either select a patient or perform a new search and select the patient
- 3) Select the date that you'd like to place these images in
- 4) Select Move Images to move the images



or

- 5) Select Cancel to close the utility



DICOM Export by Date



By clicking on the disk icon on the visits tool bar, you will load the dicom export by date.

Dicom Export by Date

Start Date: Monday, May 11, 2009 Stop Date: Monday, May 11, 2009

Image Path: [Browse]

Export Path: [Browse]

Connection String: Data Source=EXCALIBUR\SQLEXPRESS;Initial Catalog=iViews;User ID=iViews;Password=zipi

Please Note : This version of the DICOM Export only extracts the raw dicom, it does not create a new dicom with any updated changes. The future release of iViews will always update the corresponding dicom whenever a change is made in the database.

Export Stop

Save Log Close

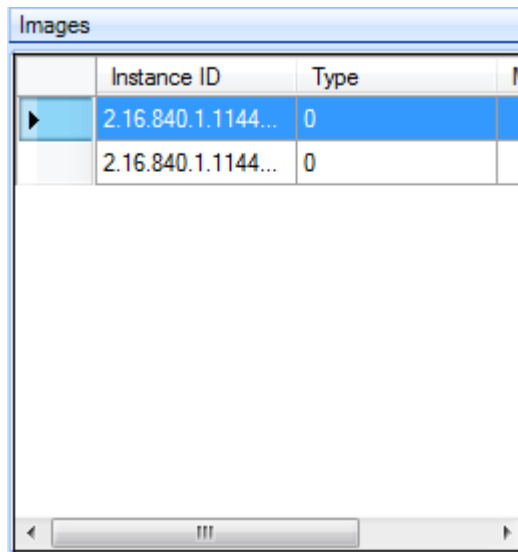
Parameter	Description
Start Date	The start date for the export
Stop Date	The stop date for the export
Image Path	The path to the appropriate images
Export Path	The path to save the exported images
Connection String	The Connection string to the database. You may specify a different database if need be.
Export	Starts the export process
Stop	Stops the export process – Only enabled during an export process
Save Log	Saves the log file of the export
Close	Closes the utility

Note : This tool allows you to cross databases to retrieve data.

Steps to Export DICOMs by date

- 1) Select the date ranges to export
- 2) Specify the location of the images
 - a. Note : this is necessary since cross database operations are supported
- 3) Specify the export path
- 4) Specify the connection string
 - a. Note : this is necessary since cross database operations are supported
- 5) Press Export to start the process
- 6) Press Stop to stop the process if needed.
- 7) Once complete, optionally save the log.
- 8) Finally, close the utility

List of Images



	Instance ID	Type	M
▶	2.16.840.1.1144...	0	
	2.16.840.1.1144...	0	

Beneath the visits list is another list called Images. Here the images are displayed in a detailed manner listing the Instance IDs, a type identifier, and the instrument manufacturer. The representation of this data structure is an advanced topic; however, this list interacts visually with the Images section. Therefore, you do not need to know the technical aspects of the DICOM representation. Please see the next section for information regarding the Images section.

Image Tools

The Imaging section is the visual representation and tools that pertain to the individual image. There are several sections in the area. Some of which interact with the visits section.

The screenshot displays a medical software interface for viewing and managing eye scan images. The interface is divided into several sections:

- Preview (1):** A large central window showing a detailed view of an eye scan. On the left is a fundus image (orange/yellow), and on the right is a cross-sectional OCT scan (colorful). A toolbar with icons for zoom, pan, and other functions is located above the preview area.
- Thumbnail Gallery (2, 3):** A grid of smaller image thumbnails below the preview. Each thumbnail is labeled "SPECTRALIS".
- Dicom Structure (4):** A panel on the right side of the interface showing metadata for the selected image. It includes sections for:
 - Instrument Information:** InstrumentName: Spectralis
 - Instrument Modality:** InstrumentModa: OT
 - Patient Demographics:** BirthDate: 10/5/1980
 - BirthDate:** The patient's DOB in the DICOM
- Information (5):** A panel on the right side of the interface showing additional metadata:
 - Modality:** OT
 - Instrument:** SPECTRALIS
 - Eye:** L
 - Manufacturer:** Spectralis
 - Series ID:** 2.16.840.1.114454.1.90306133804.357350.1.1.05

Image Tools Sections





The following lists the sections contained in the image tools:

Section	Name	Description
1	Image Toolbar	Provides tools specific to the loaded image
2	Preview	Previews the selected Image
3	Thumbnails	Displays a list of thumbnails for the specific visit. This is in conjunction with the visit tools
4	DICOM Structure	The DICOM Structure for the current image
5	Database Information	The Database information for the current image

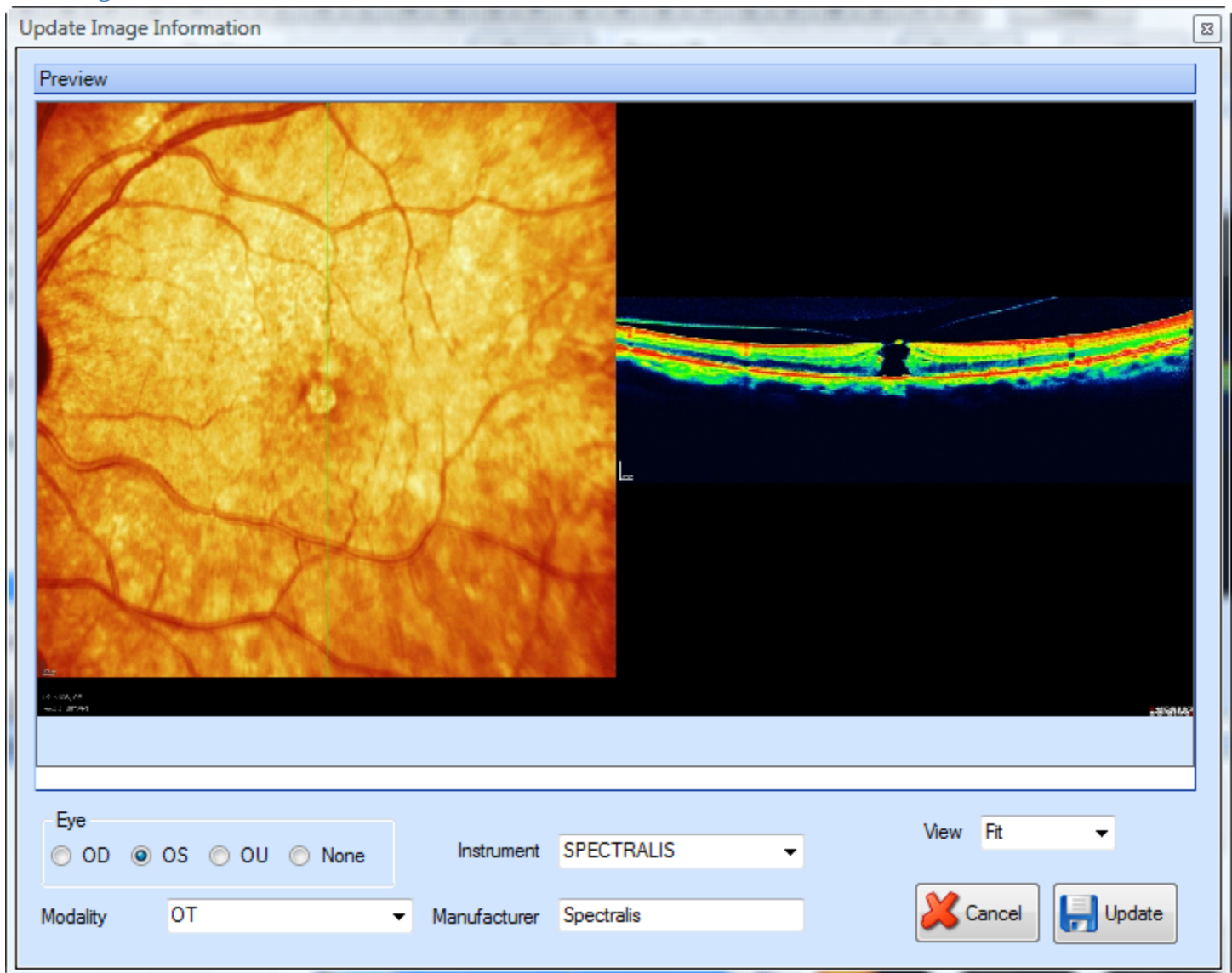
Image Toolbar

The Image toolbar contains the least amount of available tools. There are currently only 4 tools, and only three of which are applicable. The last, image import, is currently supported through the use of Zipi Media Manager. This will be enabled in an upcoming release.

The following table describes each tools function:


Tool	Name	Description
	Edit Image Data – Database	Opens a utility to allow the user to edit the individual image data.
	Delete Image	Deletes a specific image from the database
	Export Image	Exports the current image, either JPEG or DICOM.
	Import Image	Supported in future release

Edit Image Data



This utility allows the user to edit the individual image's data and categorization in the database. Please note that this utility allows you to edit one specific image. If you wish to update multiple images at once, please see the section: **Update Image Data**.

The following table describes the features of this utility.

Section	Description
Eye	The eye that this image corresponds to.
Modality	The DICOM Modality for this image.
Instrument	The instrument name for this image.
Manufacturer	The equipment manufacturer for this image.
View	Changes the view mode of the preview window.
 Cancel	Cancels the update utility.




Update

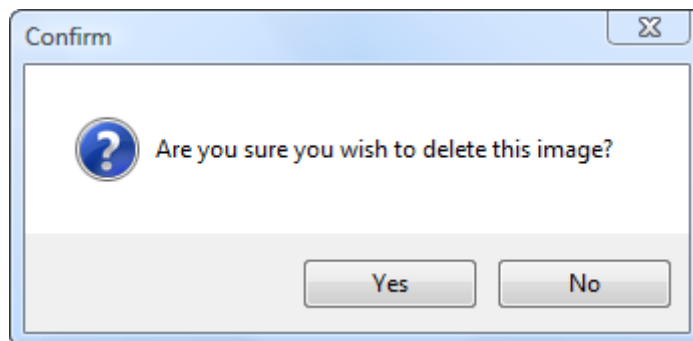
Updates the current image with the changes.

Steps to update an individual image:

- 1) Launch the Update Image utility
- 2) Specify the appropriate field information
 - a. Eye
 - b. Modality – (optional)
 - c. Instrument Name
 - d. Manufacturer – (optional)
 - e. Press updateor
Press cancel
- 3) You may change the view of the displayed image to help validate the image.

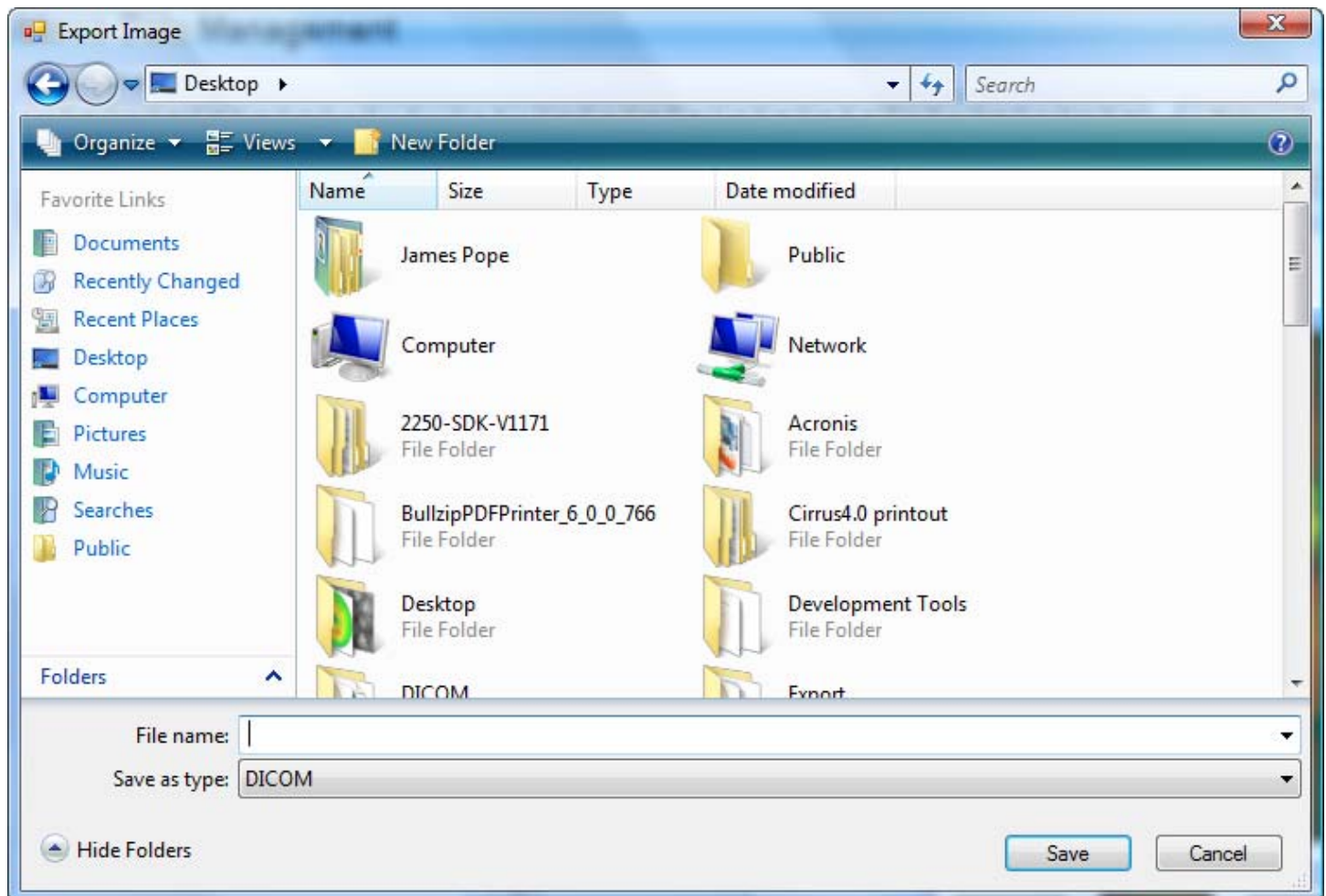
Delete Image

To delete a specific image, simply press the delete image button. . You will be prompted to confirm that you wish to delete the image. Selecting “**YES**” will delete the image, while selecting “**NO**” will cancel the delete operation. The following is the message that you will see:



Export Image

By selecting the export image button you will be asked to specify a location to save the image. In addition to the location, you may change the type of export. The supported export formats are DICOM and JPEG. To export a JPEG, change the save as type option. The following image shows the Export Image screen:



iViews Imaging System - DICOM Import Wizard

Overview

In order to view existing data from the Visupac database, the data must be processed into the iViews Imaging System. Although you could simply copy the dicoms from the image directory, this will not reflect any changes that may have been made from within Visupac.

Please note: This document references a tool included with Visupac called the DICOM Integrity Check tool. There is no available documentation to state what this tool actually does. What we have noticed is that the database will be cleansed of erroneous data and optimized. Please see the section on Prerequisites: Interbase Maintenance.

Prerequisites

System

In order to ensure a smooth and efficient conversion, certain adjustments need to be made to the server. Below is the list of items that need to be addressed:

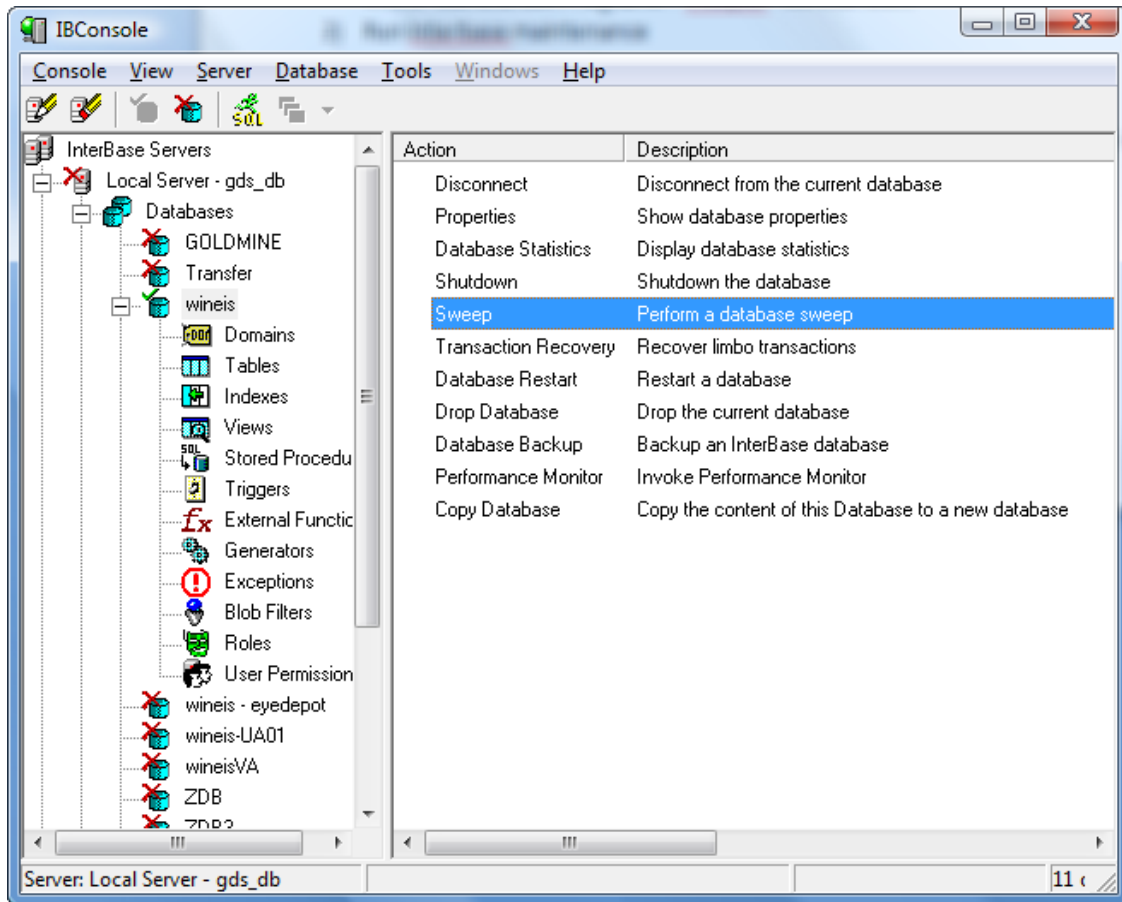
- 1) Disable any running programs and services during conversion.
You may need to enable them if you are converting data in stages.
- 2) Change the environment variable for temporary files:
 - a. Under my computer → Properties → Advanced.
 - b. Select Environment
 - c. Change the Temporary Paths to the data drive that has the large capacity.
 - d. This has the added effect of improving the system's performance even after conversion

Interbase Maintenance

To better expedite the database access, optimizing the visupac database is recommended. Please see below for the following steps.

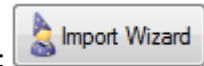
- 1) Run the DICOM Integrity Check tool.
This is found under Programs → Visupac → Service tools
- 2) Run Interbase maintenance (optional)
 - a. Open IBConsole
 - b. Navigate to the visupac database

- c. Right click on the database, select Maintenance, and select sweep.



- d. Please note : Some Visupac installations are not registered with the Interbase Server service. In this case, it might not be possible to perform the sweep operation. This will not affect the accuracy of the conversion; just potentially cause the process to run slightly slower.

DICOM Conversion



To start the conversion process, please select the Import Wizard from the iViews DB Manager:

Configuring the Import Wizard

The Import Wizard has been created to best optimize and control the conversion process. There are several techniques to use this utility and will be explained later in the document. However, before any conversion may proceed, it is necessary to explain the components and usage of the wizard.

The Figure below shows the Import Wizard:

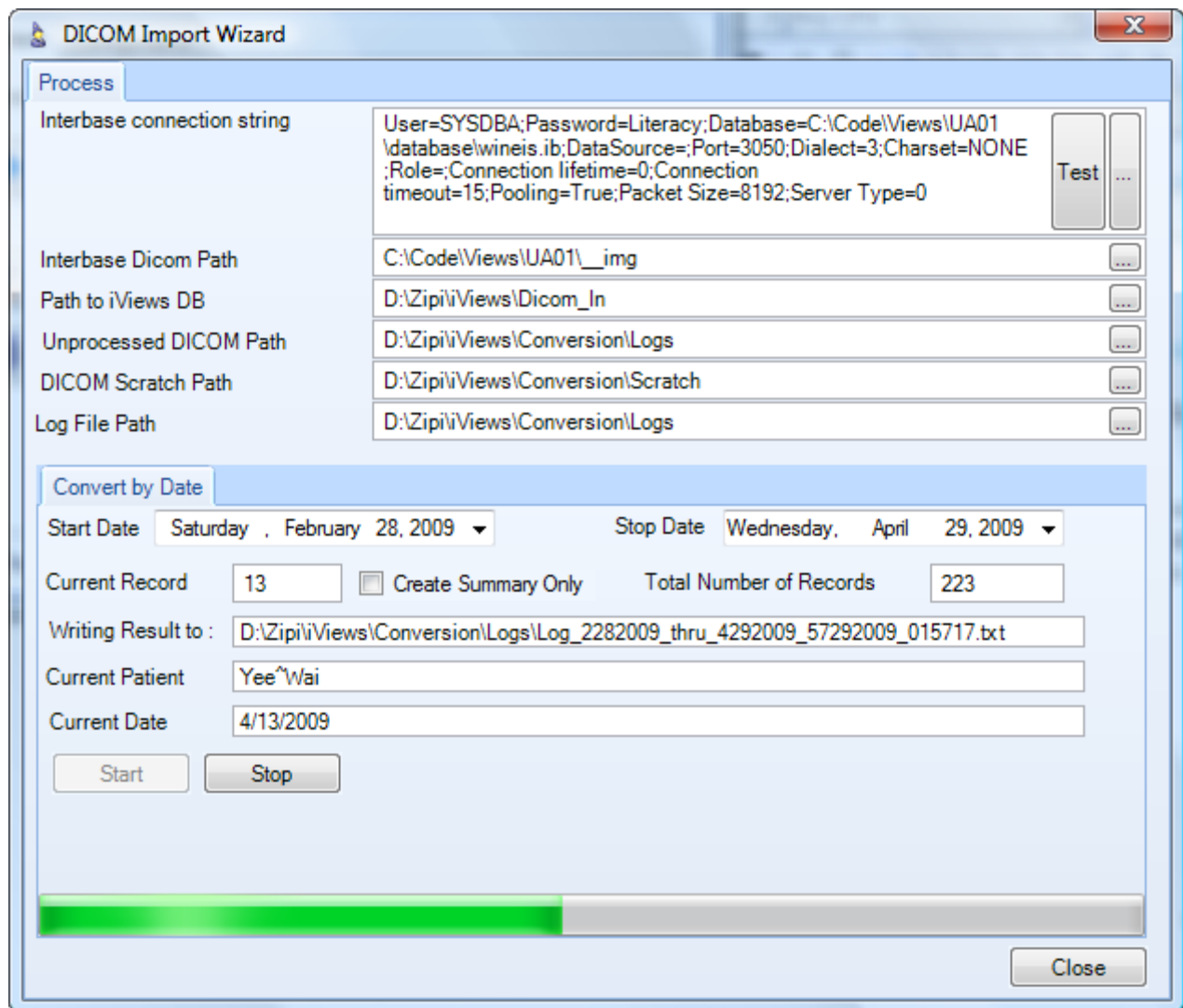


Figure 1: DICOM Import Wizard

Field	Description
Interbase Connection String	This is the connection string to the Visupac database.
Interbase DICOM Path	The path to the original DICOMs This is usually something like D:_img
Path to iViews DB	The path to save the converted dicoms. This does not have to be the Dicom_in folder for iViews, it may be any path that you chose based upon your conversion plan. It is recommended that you plan the conversions ahead of time and perform them a week before the roll over date.
Unprocessed DICOM Path	The path to save dicoms that did not process. Please note: These DICOMs are not invalid or necessarily corrupt. They simply did not get updated with Interbase data. This can be for a number of reasons, but should not be considered to be “bad data”.
DICOM Scratch Path	The temporary path to save dicoms. Please place this path on a drive that has a large amount of hard drive space
Log File Path	The location to save log files. Please note : in batched processes, there will be several log files. See “tips and tricks section” for how to use the data in the log file.
“Convert by Date” fields	
Start Date	The start date of the conversion. Please Note : this date IS inclusive
Stop Date	The stop date of the conversion. Please note : this date is NOT inclusive.
Current Record	The current record number being processed. If this number is the same for a long period of time, then the system may have encountered a corrupt file. The conversion process will generally recover.
Total Number of records	Total number of records to be converted Please note: Do not be alarmed at numbers in the tens of thousands. If you have selected 100,000 records or more, the process may take some time. If you are unsure, please see the section Tips and Tricks section.
Create Summary Only	False – Convert Data True – Do not convert data, but create logs only.
Writing Result to	The location and file name of the log file used to save the conversion results
Current Patient	The Patient that is currently being processed
Current Date	The Date that is currently being processed
Start	Starts the conversion process
Stop	Stops the conversion process

Table 1: Description of Import Wizard

The parameter section at the top will be saved when you exit the wizard. The last settings will then be loaded automatically the next time you run the wizard. Please note: that when performing batches of data, you will need to specify a new path for the “**Path to iViews DB**”.

Running the Import Wizard

After all the settings have been specified, you may then proceed to run the wizard. Our Initial tests have shown that the wizard may run unattended for upwards of 10 hours or more. This is very much dependent upon the health of the server system. If you wish to perform such a lengthy conversion, please ensure that ALL maintenance on the server has been done and that the system will not run out of hard drive space. Having 1TB free is recommended for large databases.

Known Issues

We have encountered a limitation with the import wizard. Do not try to process more than 65,355 records. This is equivalent to 64K. Our current research is lending to an Interbase interface limitation. Trying to process more than this number will cause the import wizard to lock.

In order to avoid a potential lock, please create a “summary only” log first to determine the necessary date ranges.

We are currently working on a method to circumvent this limitation.

Tips and Tricks

Getting started

It is highly recommended that you fill out a project plan for the conversion. Although the Import Wizard has undergone several improvements; not every circumstance can be accounted for. Therefore it is recommended that you start slowly with your data conversion. Convert a small date range and import them into iViews Imaging. After which, you can use the database management tools to verify the data and images. You can do this without having to update or change over the clients. This can be done weeks in advance if you so choose.

After you are certain that the data is correct, you may proceed to convert your data. If you client has a small database, you may convert the entire database in one step. We classify a small database as less than 20,000 images.

How many files am I about to convert?

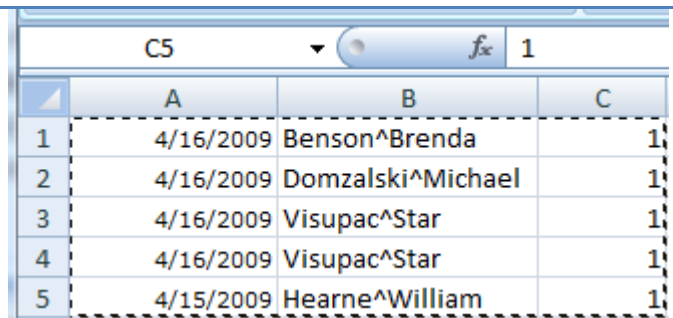
In case you need to know how many files you are about to convert, you can simply check the “create summary log” box. Then run your conversion. This will tell you how many images you are about to convert.

Manipulating Conversion Log Data

The summary section of the conversion log may be imported into excel for further analysis or into a database. The following shows the log and the data within excel.

Starting Conversion by date....4/29/2009 1:57:17 PM
Total number of images : 223
Processing 42 Patients
Total number of visits : 47
4/16/2009;Benson^Brenda;1
4/16/2009;Domzalski^Michael;1
4/16/2009;Visupac^Star;1
4/16/2009;Visupac^Star;1
4/15/2009;Hearne^William;1

Conversion Log File



The screenshot shows an Excel spreadsheet with the following data:

	A	B	C
1	4/16/2009	Benson^Brenda	1
2	4/16/2009	Domzalski^Michael	1
3	4/16/2009	Visupac^Star	1
4	4/16/2009	Visupac^Star	1
5	4/15/2009	Hearne^William	1

Excel Spread Sheet

Remotely Converting a System

If you use RDP to access the system to run the conversion, DO NOT log off your session!!! You may also need to change your server policies to prevent an automatic log off after a period of inactivity. The DICOM Import wizard is a windows application and not a service; therefore, windows can shut this process down upon a user log off call.

Scenarios

Case 1: Converting an old iViews Imaging server using Interbase and Visupac

After installation, do the following:

- 1) Ensure that there is sufficient hard drive space
- 2) Configure System Environment Variables
- 3) Perform Visupac database maintenance
- 4) Configure the Import Wizard
- 5) Convert Small batch of data, e.g. two days worth of data
- 6) Create batch conversion plan, allowing for the process to run in segments anywhere from 3 to 6 months at a time.
- 7) Finally, simply copy all batched data to the DICOM_IN folder for iViews.
- 8) After the first few conversions for the batch, you may directly send dicoms from the import wizard to the iViews DB service

Case 2: Converting a new installation

The DICOM Wizard is not required as there is no older data to import.

Case 3: Converting a Visupac Installation onto a new iViews Imaging Server

In this scenario, you may have a new iViews Imaging Server, but it never had Visupac installed. There are several ways to bring the old data from the Visupac system. A direct copy, exporting from Visupac, or you may use the Import Wizard.

In the import wizard, change the Interbase properties to be directed to the FF450 camera system. The Import Wizard is not restricted to a local conversion. This may also be useful when the camera system is quite slow, but the server system is considerably faster.

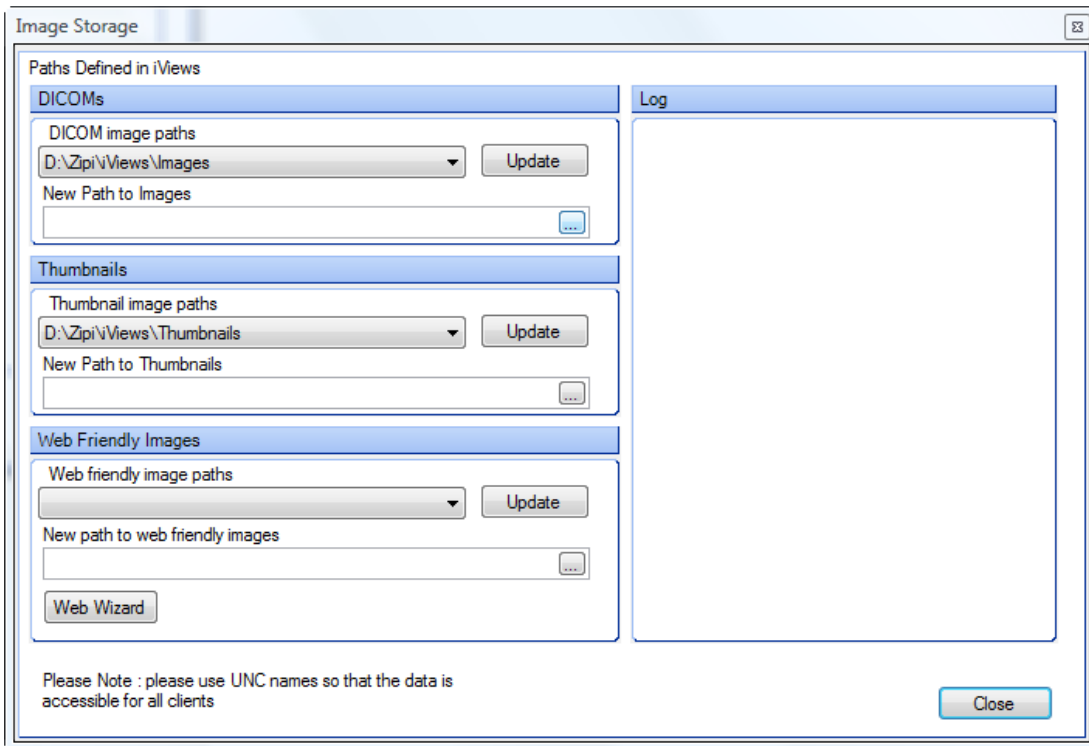
Storage

Overview

Data has a tendency to move, whether it is by happenstance or intentional. Therefore it is important to keep your database up to date with the locations of your data. The storage utility provides an easy and effective manner to quickly update your image path locations.

Getting started

Simply press the Storage button from the iView Database Manager. This will display the Image Storage Utility:



The utility is broken down into three sections, each relating to the type of image data that is stored. These are:

- 1) DICOM
- 2) Thumbnail
- 3) Web

Steps to update the image paths

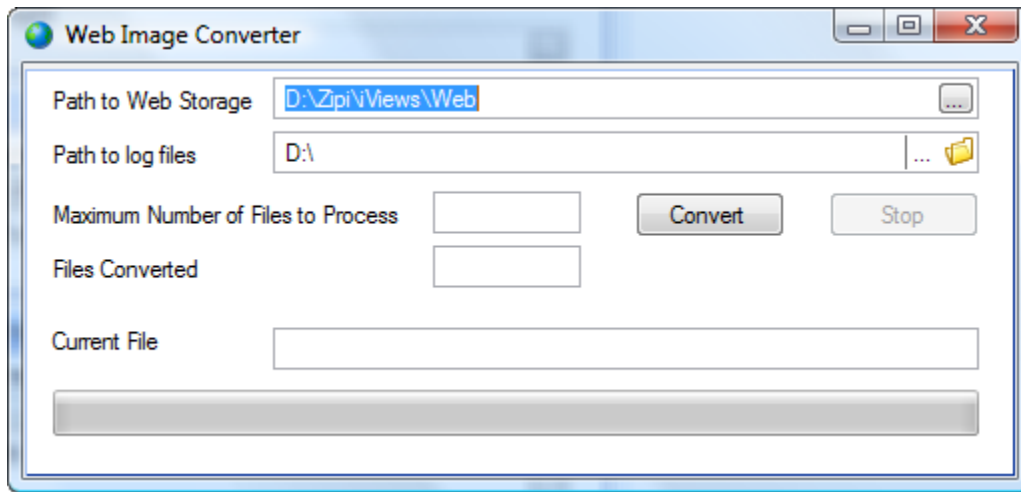
- 1) Select the image path to update from the drop down box.
Note : These are populated with values from the database, you will not have to specify an original path
- 2) Either enter or browse to the location where the images now exist.
 - a. For Servers, this should be a network based path. E.g. \\192.168.1.102\iViewsImaging\Images
 - b. For Local Installs, this may be a local path. E.g. D:\iViewsImaging\Images

- 3) Press Update for each corresponding section
- 4) The Results will be displayed in the log window
- 5) This process will need to be done for each type of image data.

Web Wizard

It may be that the client has decided to enable web imaging after they have been operating for a while. The Web Wizard will help create the historical web version representations of the data.

Please note: The Web Wizard is set to always be “top most”, therefore if you run a different application, the web wizard will still display. This is to ensure that the user must finish or cancel any conversion.



The following table lists the parameters

Parameter	Description
Path to Web Storage	This is the path that will be used to contain the reference to the web image. The same rules apply for server vs. local installs for this path. Please supply the correct path implementation to avoid having to update the path at a later date.
Path to log files	A path to save conversion log files. It could be possible that several hundred thousand images could be converted, so please specify a location that can contain a relatively large log file. Although the log files typically don't get larger than 25Kb.
Sub Tools	<div style="display: flex; align-items: flex-start;"> <div style="margin-right: 10px;"> <input type="button" value="..."/> </div> <div>Open a folder browser dialog to browse to the specific folder.</div> </div> <div style="display: flex; align-items: flex-start; margin-top: 5px;"> <div style="margin-right: 10px;"> <input type="button" value="Folder icon"/> </div> <div>Opens the specified log path in a new explorer window.</div> </div>
Maximum Number	This is to specify a
File Converted	Displays the current number of files converted
Current File	The currently converted file.
<input type="button" value="Convert"/>	Starts the conversion process – Enabled until conversion process begins
<input type="button" value="Stop"/>	Stops the conversion process – Disabled until conversion process begins

iViews Imaging User Management – Appendix

Overview

Starting with iViews Database manager version 1.0.1.18, there is a section for user management. The user management is primarily for the web, but will be used for profiles and preferences in the future. Unlike creating simple accounts for each physician in a system, the iViews imaging system will allow for singular or multiple physicians to be assigned to a single user account. The reason for this is both for logistics but also in case you are limited by the rules set forth by your EMR or PM vendor.

For example, it is possible for a referring physician to have different identifiers in a large system, obviously this is one person, but the records system sees this as separate entities. Requiring a physician to log-in multiple times is not practical and would be considered a nuisance.

Overview of user assignment:

There are a few rules to explain about user and physician assignment. They are listed below :

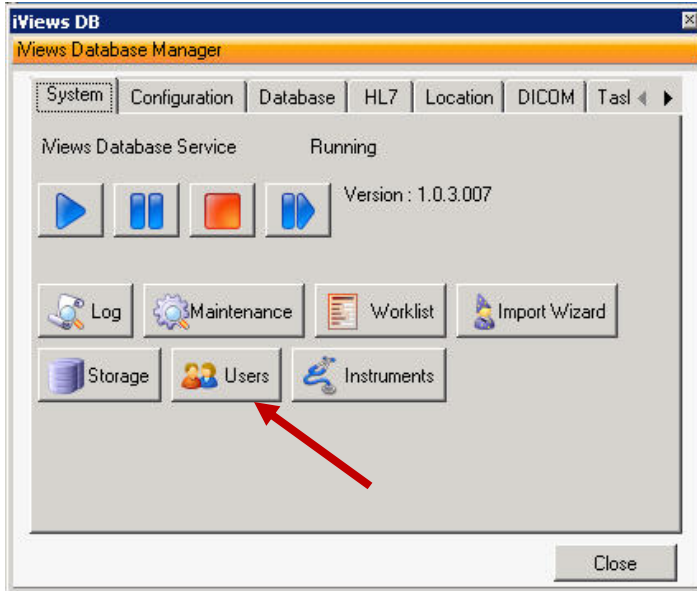
- 1) A single user account can have several physicians associated.
- 2) A physician can have several patients associated.
- 3) A **patient** can also have several **physicians** associated.

Although the last rule seems to be circular, it applies in that several different physicians could have accessed established. Perhaps to collaborate or simply share results.

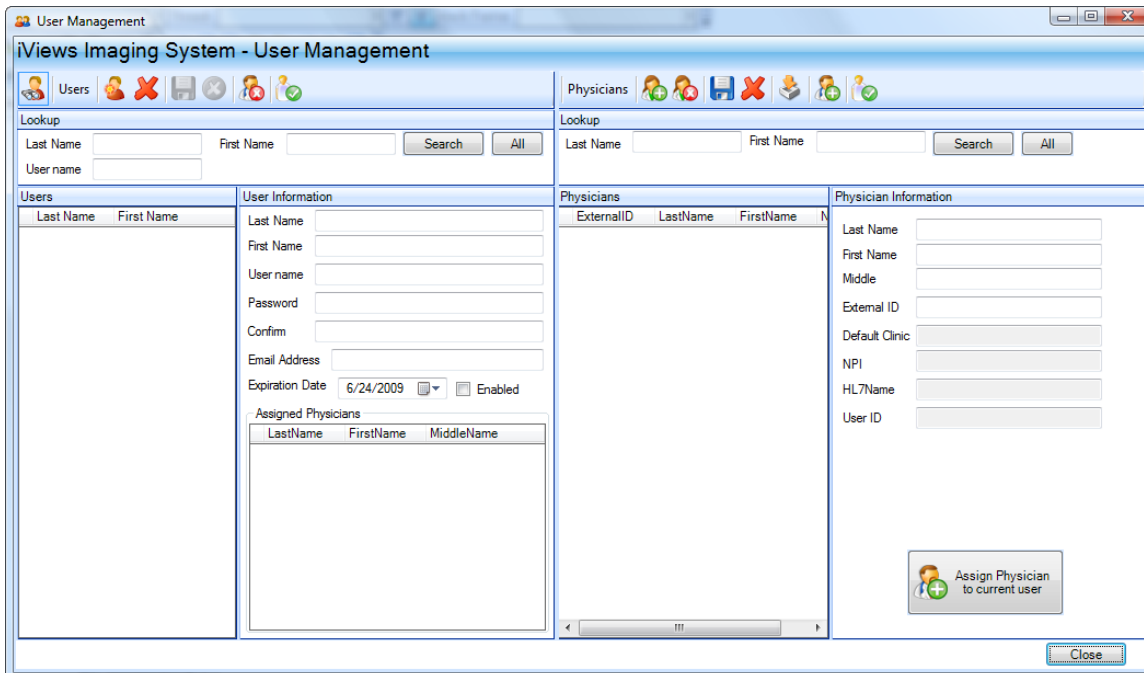
The general premise is to avoid singular relationship, this seems to fit the practical workflow model the best.

Creating Users and Physicians

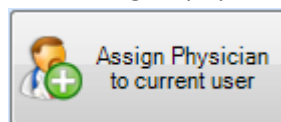
- 1) From the service manager , simply click the “users” button. (this is new in version 1.0.1.18)



- 2) This will launch the User Manager:




- 3) Each section functions independently, however, to assign a physician to the currently selected user, simply click

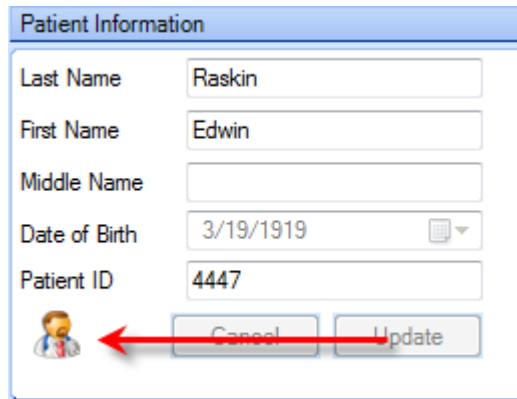


the **Assign Physician to current user** button.

- 4) Please see the following sections for more information regarding users and physicians.

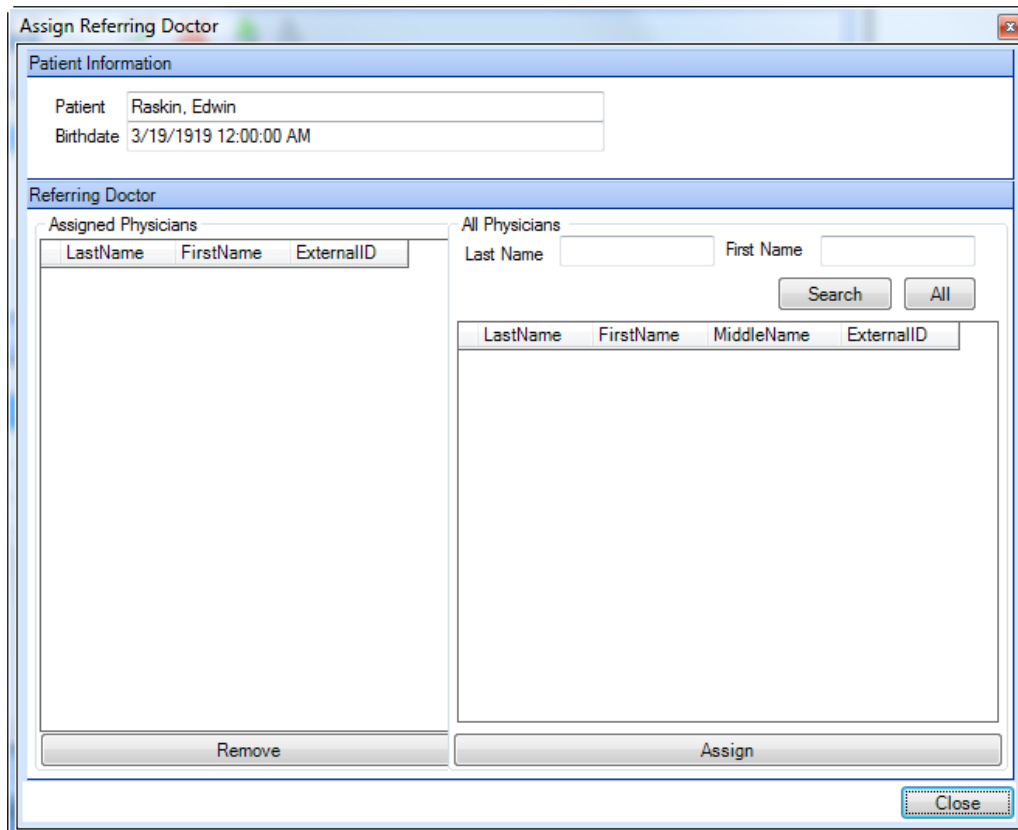
Assigning patients to a referring doctor

- 1) After selecting a patient, from the database manager screen, select the doctors icon  to launch the referring doctor assignment form.



A screenshot of a 'Patient Information' form. The form contains the following fields: Last Name (Raskin), First Name (Edwin), Middle Name (empty), Date of Birth (3/19/1919), and Patient ID (4447). At the bottom left is a doctor icon, and at the bottom right are 'Cancel' and 'Update' buttons. A red arrow points from the 'Update' button to the doctor icon.

- 2) You will then see a form that will let you retrieve referring doctors:



A screenshot of the 'Assign Referring Doctor' form. The form is divided into two main sections: 'Patient Information' and 'Referring Doctor'. The 'Patient Information' section shows Patient: Raskin, Edwin and Birthdate: 3/19/1919 12:00:00 AM. The 'Referring Doctor' section is split into two panes. The left pane is titled 'Assigned Physicians' and contains a table with columns: LastName, FirstName, ExternalID. The right pane is titled 'All Physicians' and contains search fields for Last Name and First Name, a 'Search' button, an 'All' button, and a table with columns: LastName, FirstName, MiddleName, ExternalID. At the bottom of the 'Assigned Physicians' pane is a 'Remove' button, and at the bottom of the 'All Physicians' pane is an 'Assign' button. A 'Close' button is located at the bottom right of the entire form.

- 3) You can search for doctors by either retrieving all the doctors or doing a name match.
- 4) To assign a doctor, simply select the doctor and press "Assign".

- 5) To remove a doctor, simply select the doctor in the assign physicians and press "Remove".
- 6) You can assign multiple doctors to a single patient.

Assign Referring Doctor

Patient Information

Patient: Raskin, Edwin
Birthdate: 3/19/1919 12:00:00 AM

Referring Doctor

Assigned Physicians

LastName	FirstName	ExternalID
Jewell	David	1324
James C	Pope	1324

All Physicians

Last Name: _____ First Name: _____

Search All

LastName	FirstName	MiddleName	ExternalID
James	Pope	C	1231
James C	Pope	C	1324
Smith	LL Cool J		12131
Kevlar	Def Leppard		
Jewell	David		

Remove Assign Close

- 7) Press close to close the form.