

Migration Assistant



Select this tool to migrate images currently stored within Osirix™ to a Horos database.

Migration Assistant

Movie Export



Select this tool if you wish to export a study or series in movie format. To do this first select the file(s) or case(s) you wish to export.

Consecutive cases can be selected by highlighting the first case, then holding down the ‘Shift’ button on your computer or laptop and highlighting the remaining cases by scrolling the cursor. Holding down the ‘Command’ button whilst moving the cursor, to select the required cases, can highlight non-consecutive cases.

Select the ‘Movie Export’ icon and when the pop up window appears select the desired location either on a local or external drive. Horos will save a copy of the movie in a folder in the chosen location. It is possible to attach an optional HTML description of the files.

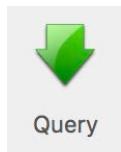
Notification



This feature requires the web server to be activated as well as correct configuration of the mail settings, see Chapter 1. To send a notification to a user on the web server, select the desired series or studies then click on the ‘Notification’ icon. The notified user then receives an email notification containing a direct link to the selected studies.

Consecutive cases can be selected by highlighting the first case, then holding down the ‘Shift’ button on your computer or laptop and highlighting the remaining cases by scrolling the cursor. Holding down the ‘Command’ button whilst moving the cursor, to select the required cases, can highlight non-consecutive cases.

Query



The query tool allows you to search for, and retrieve, images from any source which is DICOM compliant (4.12a). The default search criterion is patient name. When all or part off the name is entered, Horos searches all compliant sources for matching DICOM files. These may be local, external or on a networked server. It is possible to set limiting criteria to narrow the search results, such as acquisition time or study type.

By using your cursor to select an alternative field option, from those listed along the top of the search window, you can change the search field, for example to patient ID or Referring Physician (4.12b). Matching files will be displayed in a list at the bottom of the search window. Further information on DICOM compliance can be found later in this Chapter.

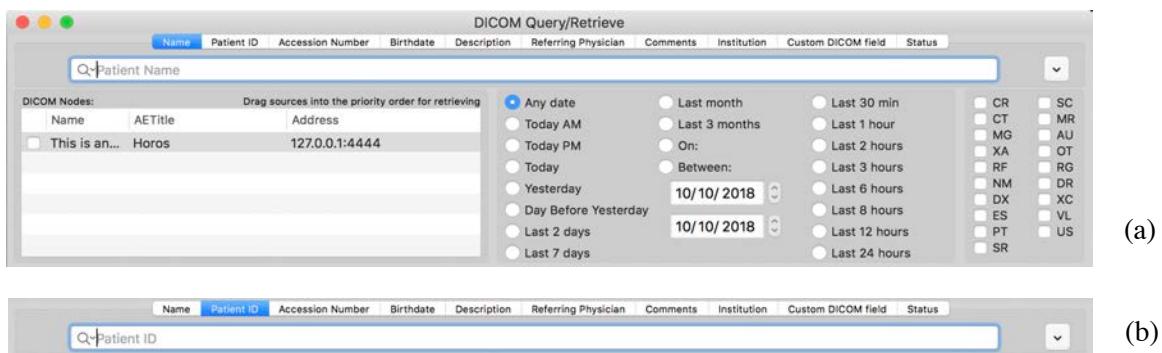


Figure 4.12 (a) DICOM ‘Query’ window with (b) enlarged image of the search fields

Report



If a report has been entered for a selected study it can viewed by selecting the ‘Report’ icon. If a report has yet to be entered, a report template will automatically open and text can be input and then saved (Fig 4.13). Multiple templates are available and can be the ‘Report’ icon.

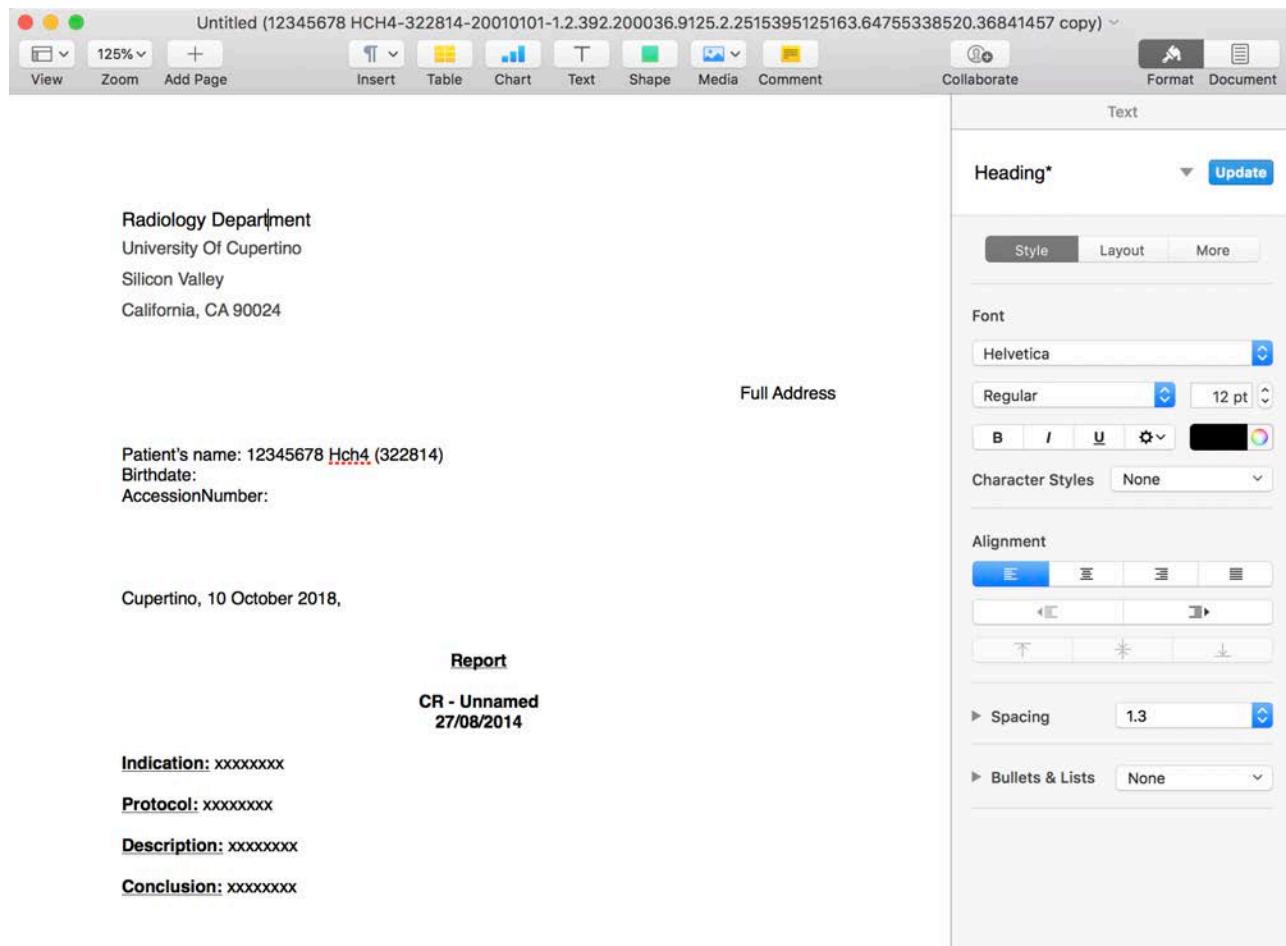


Figure 4.13 Example report template

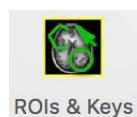
Reports can also be generated within Horos Cloud, an optional specialized plugin. One of the functions of Horos Cloud is as a **repository for generating and storing radiological reports**. Reports can be created in a browser environment and then emailed to recipients or securely stored and archived. Further information on cloud reporting can be found in Chapter 2.

Restore views



This tool allows the user to restore views to their original state.

ROIs and Keys



Within a selected study, images containing regions of interest (ROIs), or those labelled as ‘key’ images, can be selected independently of other images within the Horos database.

To open only those images containing either ROI’s or labelled as ‘key images’ select the ROIs and Keys icon.

To select only images with ROIs, select the ROI & Keys icon whilst simultaneously holding down the ‘shift’ key on your keyboard.

Alternatively, should you wish to select only ‘key’ images, select the ROIs and Keys icon whilst simultaneously holding down the ‘option’ key on your keyboard. If this is the first time you have performed this function a pop-up window will appear (Fig 4.14)

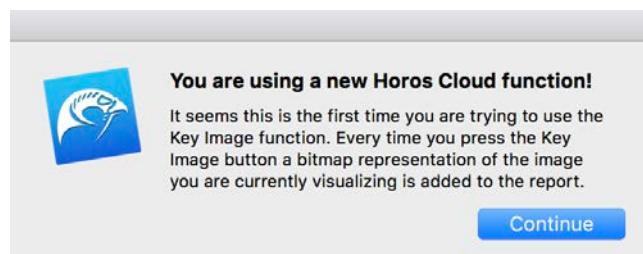


Figure 4.14 Pop-up window attached to the ROIs and Keys icon

To label images as ‘key’ images, double click on the image to bring up the viewer. At the top left of the toolbar, click on the ‘Keys’ tool. The image will also automatically be added to a report for the study in Cloud reporting. If this is the first time you have used this feature a pop up box will appear as above.

ROIS and key images are described in more detail in Chapter 6.

Search

To quickly access specific studies or series, use this tool which is located on the far right of the toolbar at the top of the database window (Fig 4.15).

To do this enter part or all of a field entry, for example patient name. The database will then be searched for all entries containing those characters, which are made in strict comparison of the character string. Horos will search the entire database, including distant DICOM nodes, if the PACS on Demand feature is activated, see Chapter 9

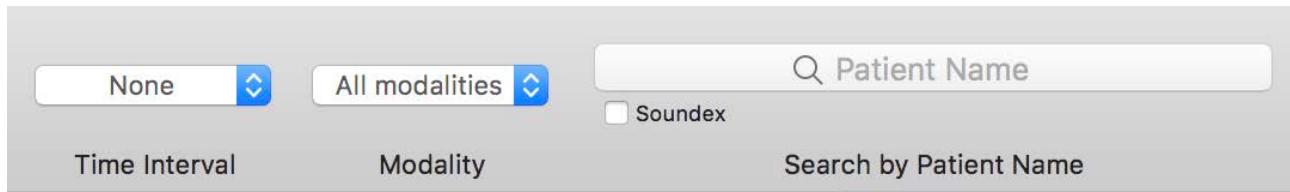


Figure 4.15 The search toolbar, located at the top right of the database window

It is possible to narrow the search to a specific field by using the drop down menu. This is accessed by clicking on the downward facing arrow between the magnifying glass and field box (Fig 4.16)

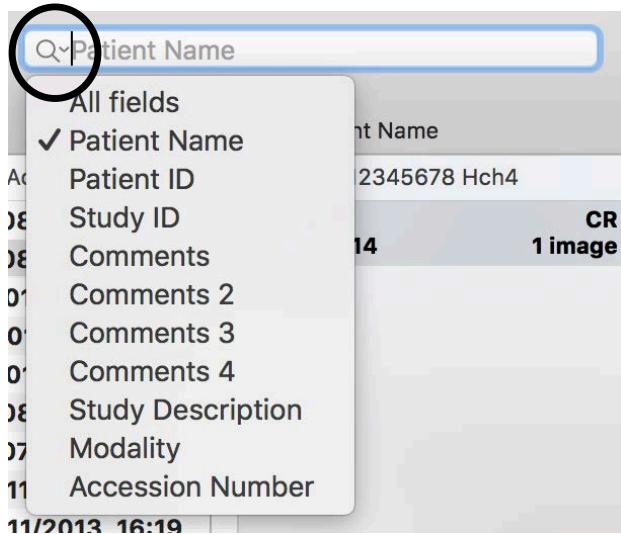


Figure 4.16 Drop down menu in the 'Search' box

If the correct spelling of a name is unknown the Soundex algorithm can be utilized to identify the best available match (Fig 4.17). When using this algorithm, the sonority of the character string is used as opposed to the strict comparison of the characters.

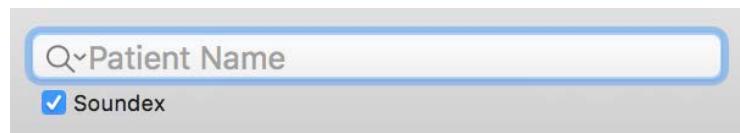


Figure 4.17 Location of the 'Soundex' algorithm function

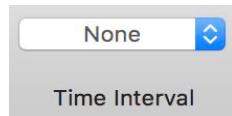
Send



To send a selected study to a specific location, select this tool by clicking on the ‘Send’ icon. The study is then sent to a DICOM node using the DICOM Send protocol (C-STORE SCU). Further information on sending studies or series can be found in Chapter 9.

Consecutive cases can be selected by highlighting the first case, then holding down the ‘Shift’ button on your computer or laptop and highlighting the remaining cases by scrolling the cursor. Holding down the ‘Command’ button whilst moving the cursor, to select the required cases, can highlight non-consecutive cases.

Time Interval



It is possible to filter the database study list, visible in the top left quadrant of the database window, to show only those files acquired within a set time protocol. To do this, click on the drop down menu labelled ‘Time interval’ visible on the right hand side of the tool bar. The time interval can be adjusted using pre-defined intervals from a drop down list (Fig 4.18).

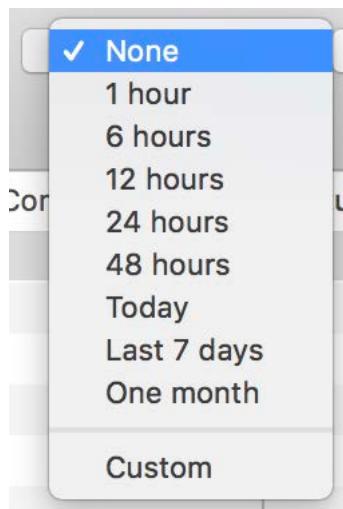
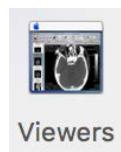


Fig 4.18 Time interval filter for the Study List

Viewers



Clicking on this icon will bring opened viewers windows to the foreground. This feature is only activated if a viewer is opened. More information on this can be found in Chapter 5

Study list

The database window displays the Study list in the upper left quadrant (Fig 4.19). DICOM images belonging to the same patient within the study list, are automatically sorted and grouped by patient, study and series.

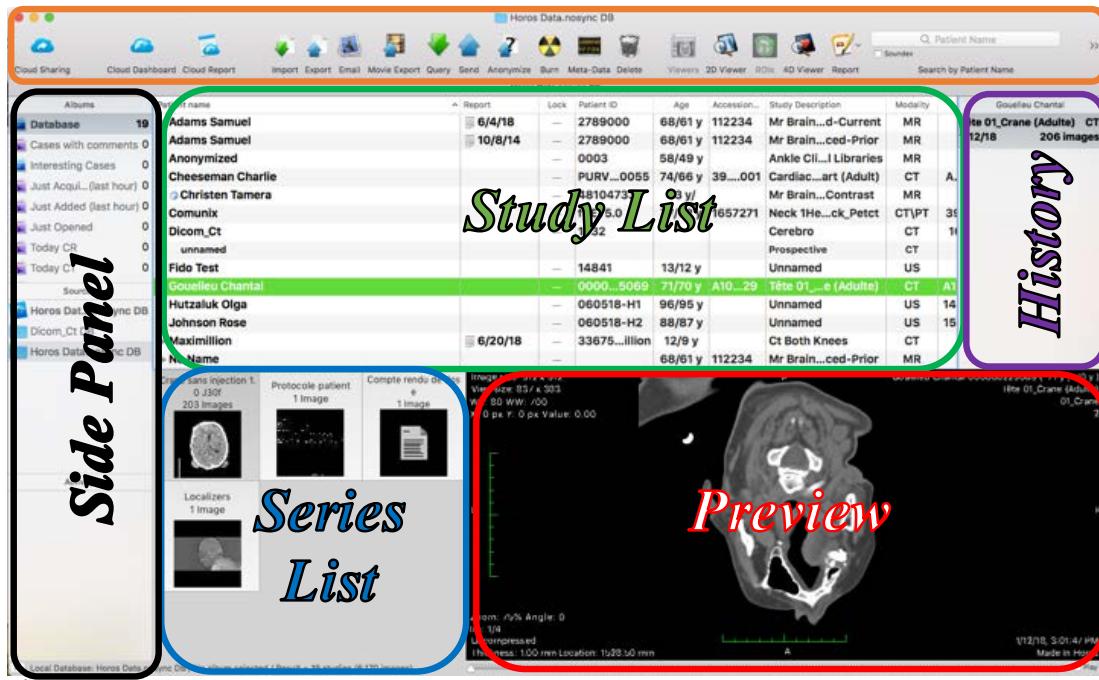


Figure 4.19

The column information for each study working from left to right of the default display is as follows:

Patient name

Report

Lock

Patient ID

Age

Accession number

Study Description

Modality

ID

Comments

A small icon is displayed if a report is attached

Identified by a padlock icon, this prevents against deletion

This is computed automatically by Horos when a D.O.B is entered

Unique identifier

For example ‘Chest’

The imaging modalities utilized in the studies

Patient ID number

Up to 4 rows of comments can be input

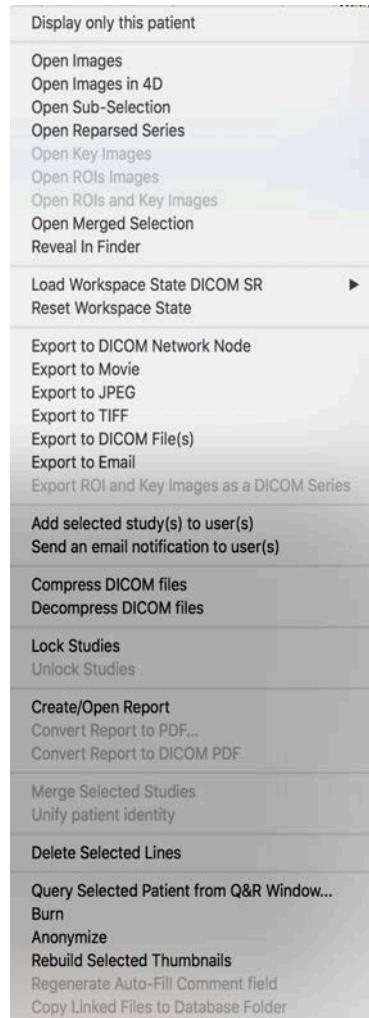
<i>Status</i>	Can be set to: empty, unread, reviewed or dictated
<i>Date Acquired</i>	Acquisition date of the study

To sort the studies and images in the ‘Study List’, simply click on the corresponding header. It is also possible to adjust the order in which the columns are displayed by dragging the column header to an alternative position. Additional column headings are available by right clicking the mouse over one of the column headers.

The additional fields available are; #im, number of images in the study, #series, number of images in the series, date added, the date the study was added to Horos, date opened, when the study was last opened in Horos, Date of Birth, Institution, Performing Physician and Referring Physician.

Opening a study or series

Move your mouse to hover over the corresponding line of the required study or series within the study list, then double click your mouse.



Deleting an image, series or study

Select the desired image, series or study from the study list and then press either the delete button on your keyboard or the ‘Delete’ icon from the toolbar.

Copying or exporting

To copy or export selected studies to a remote database for example, or to the desktop as files, drag and drop the desired lines. To do this, first select the desired images, studies or series using your mouse. Then drag the selected cases to the desired location.

Consecutive cases can be selected by highlighting the first case, then holding down the ‘Shift’ button on your computer or laptop and highlighting the remaining cases by scrolling the cursor. Holding down the ‘Command’ button whilst moving the cursor, to select the required cases, can highlight non-consecutive cases.

A contextual menu, accessed by right-clicking your mouse in the area of the study list, is available for functions such as merging studies or burning to CD/DVD (Fig 4.20)

Figure 4.20 Contextual menu for the ‘Study list’ accessed by right clicking the mouse over the study list

History

Displayed within the ‘History’ view are all available comparative studies of the series. It is possible to select studies from the History view or the study list.

Series List

The series list is located in the bottom left quadrant of the database window. Here, small image thumbnails represent each of the series of images within the study on display. To select a series to view, move the cursor over the thumbnail of the desired series and click or double click the mouse/mouse pad. The series will then be visible in the Series Preview area, in the bottom right quadrant of the Horos database window.

A contextual menu containing a set of functions, for example merging cases or deleting a series, are available by performing a right mouse click on the thumbnail of an image or series within the series list (Fig 4.21).



Figure 4.21 The contextual menu available for the Series list

Moving a series

To copy a series, drag and drop one or multiple image thumbnails (insert detail) to an alternate local or remote location. To do this, first select the desired images, studies or series using your mouse. Then drag the selected cases to the desired location.

Consecutive cases can be selected by highlighting the first case, then holding down the ‘Shift’ button on your computer or laptop and highlighting the remaining cases by scrolling the cursor. Holding down the ‘Command’ button whilst moving the cursor, to select the required cases, can highlight non-consecutive cases.

Exporting a series

To export a series in DICOM format to a nominated local directory or external storage or networked device, select the desired thumbnail(s) and click on the ‘Export’ icon. Images can also be exported to the desktop, where they will appear in a folder. It is possible to export either single or multiple studies or series. Where it is the later, hierarchical folders or a single directory can be used.

Consecutive cases can be selected by highlighting the first case, then holding down the ‘Shift’ button on your computer or laptop and highlighting the remaining cases by scrolling the cursor. Holding down the ‘Command’ button whilst moving the cursor, to select the required cases, can highlight non-consecutive cases.

Note, files which have previously been compressed into JPEG will still be exported as a DICOM file.

Series Preview

A quick overview of this feature is described here. Series preview allows a quick preview of the selected Series. These are viewed in the ‘Series’ Preview’ section of the main database window, visible in the lower right quadrant of the window.

Basic image manipulations, for example zoom, pan, rotate and WL/WW (Window Length/Window Width) are available using this function.

To preview a series, move the cursor over the thumbnail of the desired series and click or double click the mouse/mouse pad. The series will then be visible in the Series Preview area, at the bottom right of the Horos window.

To browse through the stack of images in the previewed series, a scroller is available in the preview panel. This provides the option to directly select a given image.

Auto-play will loop through the image stack continuously. To select this, click on the ‘Auto-Play’ button.