



optomize[®]
systematic screening

Photography in OptoMize V4

<i>Created on:</i>	<i>10th October 2013</i>
<i>Updated on:</i>	
<i>Product:</i>	<i>OptoMize V4</i>
<i>Document Version:</i>	<i>1</i>

Confidentiality Note:

Information and data contained in this document is confidential and may be covered by a commercial non disclosure agreement, reproduction and dissemination in any form whatsoever without the express authorization of Digital Healthcare Ltd is forbidden. The company also expresses its right of copyright over certain material contained within this report and reserves the right to seek redress in the event of a breach of any copyright infringement

Purpose of this Document

This document is intended for screeners to guide them in carrying out Photography tasks required in OptoMize V4.

Other documents that may be relevant to screeners include:

UG0xx - OptoMize V4 Clinical Tasklist Icons

UG072 - Pre-Screening in OptoMize V4

Table of Contents

<i>General Information</i>	<i>3</i>
<i>Listing Patients for Photography</i>	<i>4</i>
<i>Verifying Patient Consent</i>	<i>6</i>
<i>Updating Patient Details.....</i>	<i>7</i>
<i>Verifying Pre-Screening Details.....</i>	<i>8</i>
<i>Viewing & Adding Notes.....</i>	<i>9</i>
<i>Capturing Photographs.....</i>	<i>10</i>
<i>Image View Controls.....</i>	<i>13</i>
<i>Triaging the Photographs.....</i>	<i>15</i>

General Information

In this document the word *click* will be used during certain steps, unless otherwise specified this refers to a left click with the mouse.

When working through the pre-screen process, you may be asked to click on the **[Next]**, **[Finish]**, **[Cancel]** or **[Back]** button. These are located in the top left hand corner of the screen (figure 1).

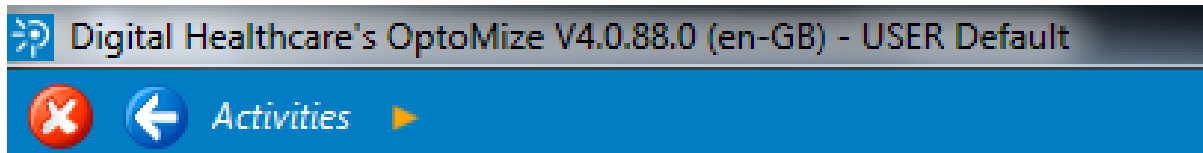



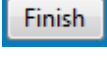


Figure 1

-  This is the **[Cancel]** button
-  This is the **[Back]** button
-  This is the **[Next]** button
-  This is the **[Finish]** button (not shown in figure 1, will appear in place of **[Next]** button where relevant)

Listing Patients for Photography

Once the patient has been pre-screened they will be available for photographs to be taken.

- You can display a list of patient attending on that day from the *Main Activities screen* shown in figure 2.

Note: The *Main Activities Screen* may look slightly different to figure 2 depending on the role that has been assigned to you.

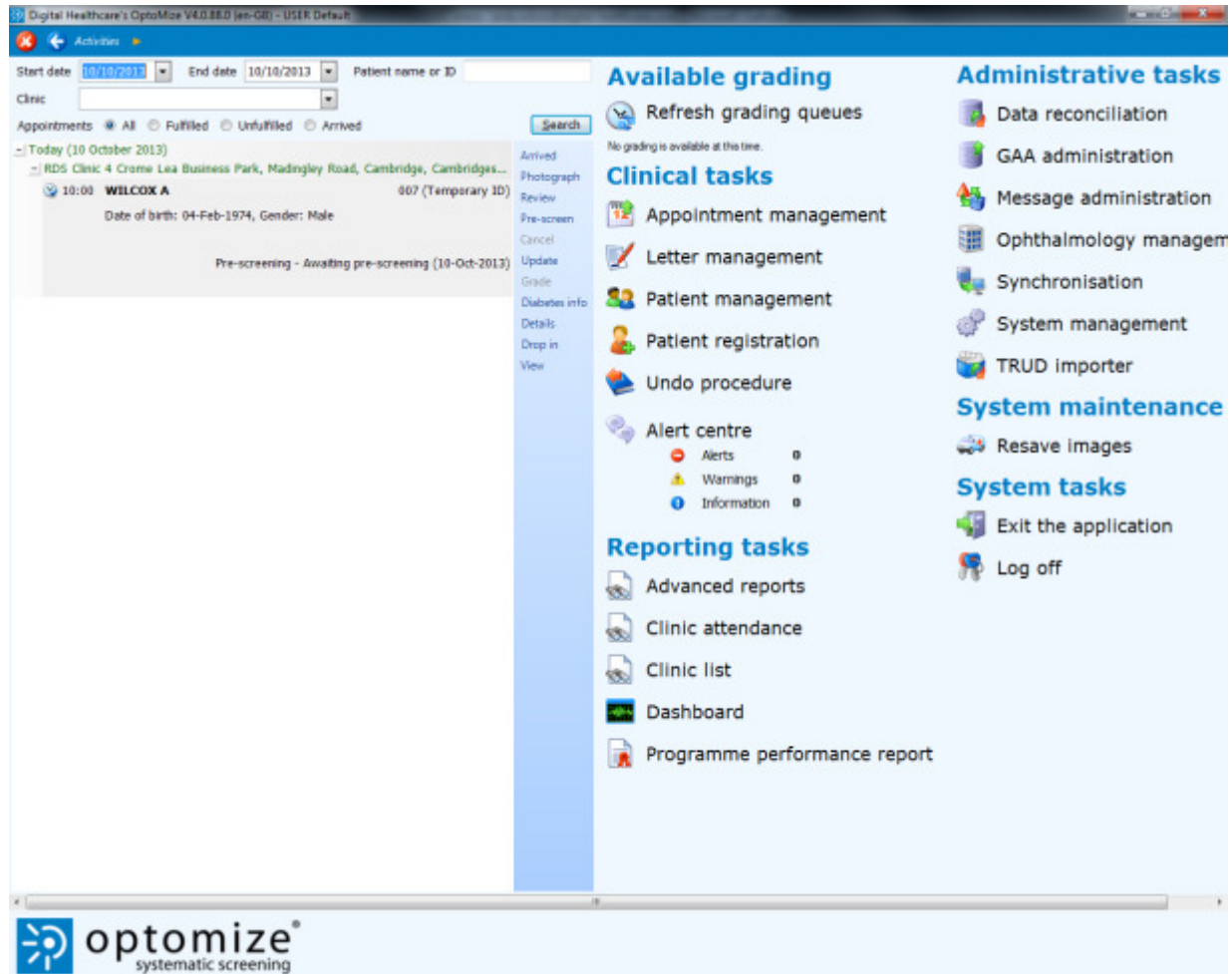


Figure 2

- To identify the patients to be photographed you can use the search filter section. This is located towards the top left of the screen and shown in figure 2.

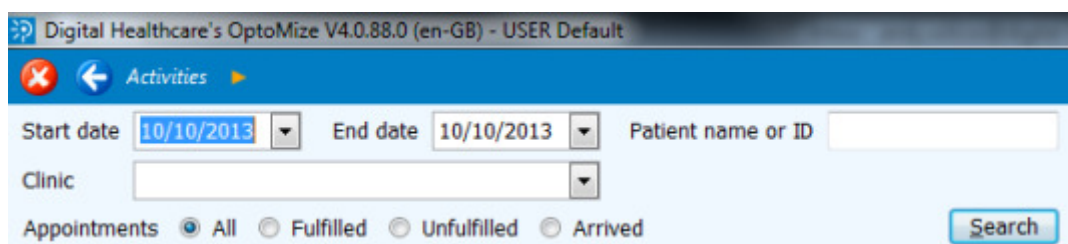








Figure 3

- You can restrict the search to specific dates using the start date and end date drop down boxes and clicking on the **[Search]** button.
- You can search for a specific patient by entering a name or ID in to the text box and clicking on the **[Search]** button.
- You can search for a specific patient by selecting the patient's clinic in the clinic drop down box and clicking the **[Search]** button.
- You can narrow the list of patients displayed to show either:
 - All Appointments - Shows every appointment within the date range
 - Fulfilled Appointments - Shows all patients that have been pre-screened & Photographed within the date range
 - Unfulfilled Appointments - Shows all patients that have not yet been seen i.e. pre-screened & Photographed within the date range
 - Arrived – Shows all patients that have been marked as having arrived
- Select the radio button corresponding to the type of appointments you want to view and click on the **[Search]** button.

Note: The searchable date range is restricted to 1 month by default, it is possible to increase this range however doing so can have a negative effect on speed so is not recommended.

When you have performed the search, a list of patients will be displayed. Each patient has an icon to the left of their appointment time; the most relevant icons have the following meanings:

-  - Patient has an unfulfilled appointment
-  - Patient has been pre-screened but not photographed
-  - Images have been taken for the patient
-  - The encounter has been assessed
-  - Patients have had a photography consultation but no photographs have been saved
-  - Patient has been marked as having arrived

Note: Refer to user guide *UG0xx OptoMize V4 Clinical Tasklist Icons* for a full list of icons and their meanings.

When you have identified the list of patients, the next step is to choose the patient and carry out the photography.

- Highlight the relevant patient who is being photographed and click on the *photograph* link to the right of the patient list (shown in figure 4).

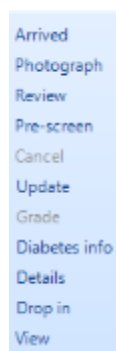


Figure 4

Note: The photograph link will be greyed out for patients whose images have been assessed. Until primary grading has been completed you will be able to perform the pre-screen and photography options repeatedly on a patient. Until photography has been completed you will be unable to select the grade link.

Verifying Patient Consent

- After clicking on photograph you will be taken to the *Photography: Confirm Patient* screen shown in figure 5.

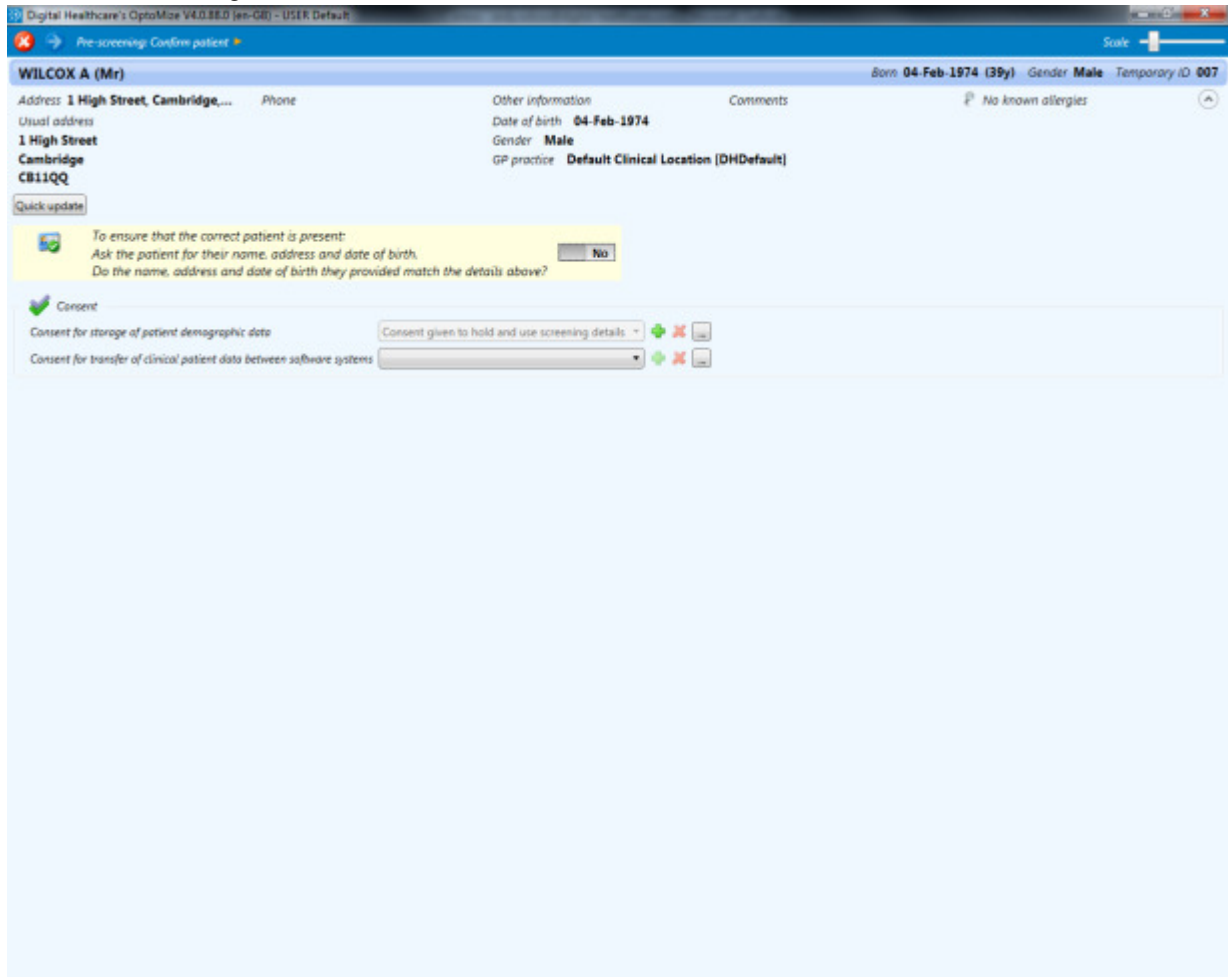


Figure 5

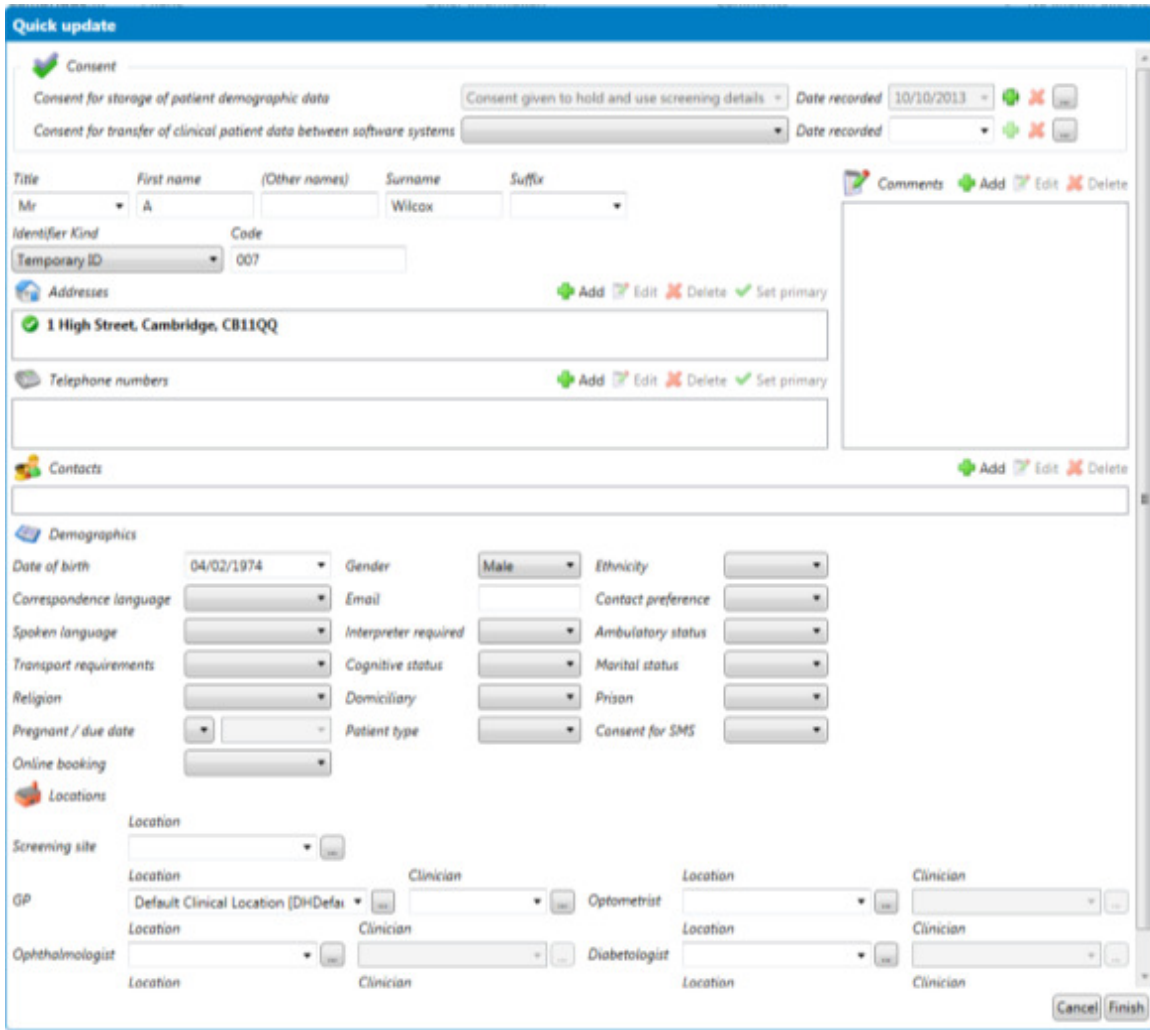
- At this stage you will need to confirm the patient identity and gain their consent for carrying out the procedures.

Note: This screen may have slightly different options depending on your configuration. The action of gaining or denying consent is determined by selecting the left-hand switch next to the confirmation question for 'Yes' or the right-hand switch for 'No'. Gaining consent will allow you to move on to the next section.

Note: You will be unable to click **[Next]** until you have changed the 'Are the above details correct?' switch from 'No' to 'Yes'. If for any reason you exit this screen and return to it, you will need to select the 'Yes' switch again.

Updating Patient Details

- If there are inaccuracies in the patient information, you are able to carry out a quick update of the main patient information. Click on the **[Quick Update]** button to change details, the screen shown in figure 6 will appear.



Quick update

Consent

Consent for storage of patient demographic data Consent given to hold and use screening details Date recorded 10/10/2013

Consent for transfer of clinical patient data between software systems Date recorded

Personal Information

Title First name (Other names) Surname Suffix

Identifier Kind Code

Addresses

Telephone numbers

Contacts

Demographics

Date of birth Gender Ethnicity

Correspondence language Email Contact preference

Spoken language Interpreter required Ambulatory status

Transport requirements Cognitive status Marital status

Religion Domiciliary Prison

Pregnant / due date Patient type Consent for SMS

Online booking

Locations

Screening site

GP Location Clinician Optometrist Location Clinician

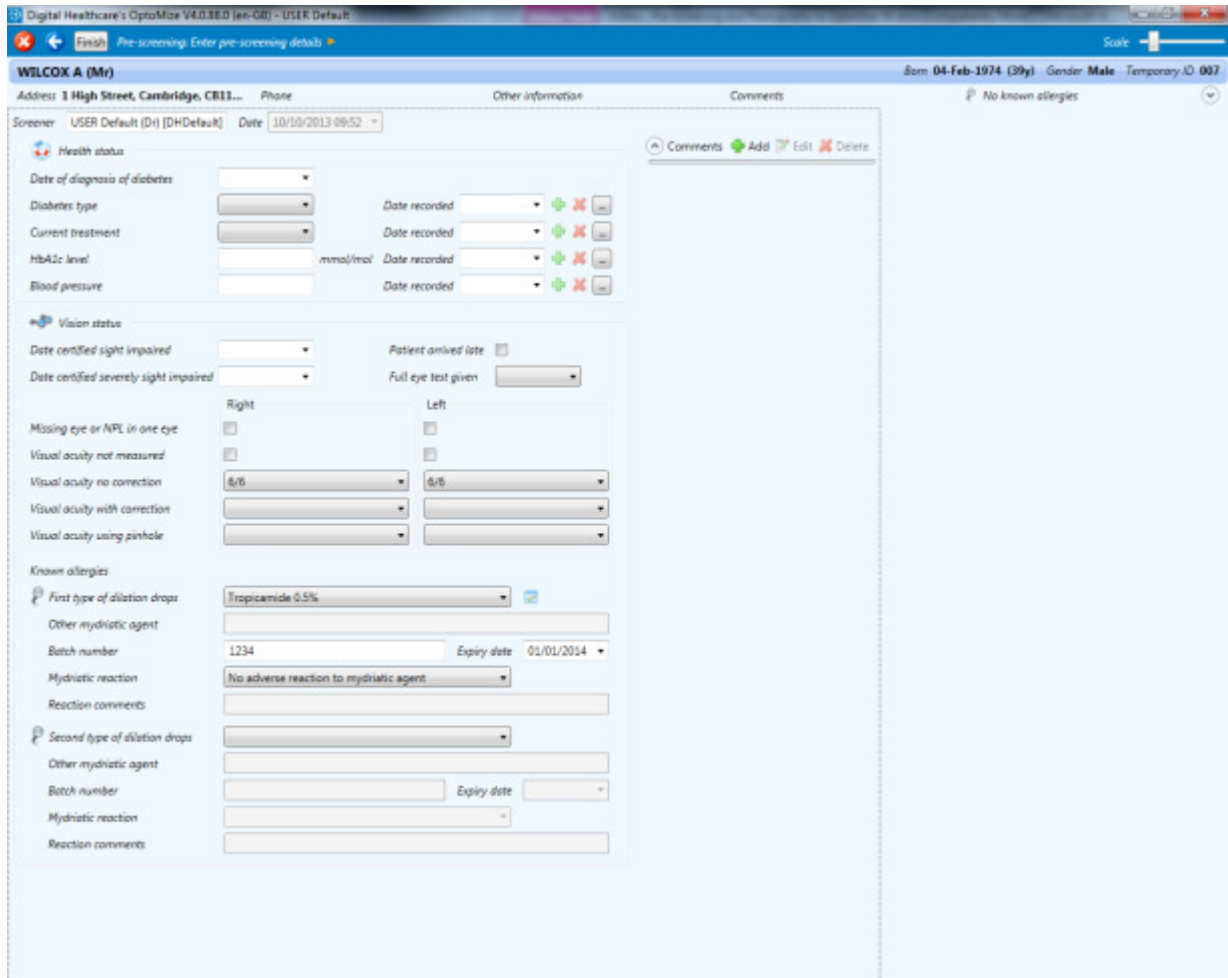
Ophthalmologist Location Clinician Diabetologist Location Clinician

Figure 6

- Make amendments as necessary and click on the **[Finish]** button.
- When you have gained consent and made any updates (if required), click on the **[Next]** button to proceed to the next step.

Verifying Pre-Screening Details

The next screen is the *Photography: Enter Pre-Screening Details* screen and is shown in figure 7.



The screenshot shows a web application interface for entering pre-screening details for a patient named WILCOX A (Mr). The patient's information includes: Born 04-Feb-1974 (39y), Gender Male, Temporary ID 007, and No known allergies. The screen is divided into several sections:

- Health status:** Fields for Date of diagnosis of diabetes, Diabetes type, Current treatment, HbA1c level (mmol/mol), and Blood pressure. Each field has a corresponding 'Date recorded' field with a dropdown menu and a status indicator (green plus or red X).
- Vision status:** Fields for Date certified sight impaired, Date certified severely sight impaired, Patient arrived late (checkbox), and Full eye test given (dropdown). It also includes visual acuity measurements for Right and Left eyes, categorized by 'Missing eye or NPL in one eye', 'Visual acuity not measured', 'Visual acuity no correction', 'Visual acuity with correction', and 'Visual acuity using pinhole'.
- Known allergies:** Fields for First type of dilation drops (Tropicamide 0.5%), Other mydriatic agent, Batch number (1234), Expiry date (01/01/2014), Mydriatic reaction (No adverse reaction to mydriatic agent), and Reaction comments.
- Second type of dilation drops:** Fields for Second type of dilation drops, Other mydriatic agent, Batch number, Expiry date, Mydriatic reaction, and Reaction comments.

Figure 7

You can verify the information recorded during the pre-screening here and update any fields as required.

Viewing & Adding Notes

If you want to view or add additional information during the pre-screen, click on the *comments* drop down button at the bottom left of the screen where you can view previous comments or click on the *Add* button at the bottom right of the screen to add any new comments or notes (figure 8).

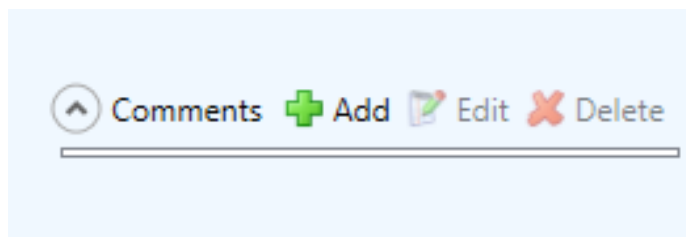


Figure 8

The *Add comment* box will be displayed (figure 9).

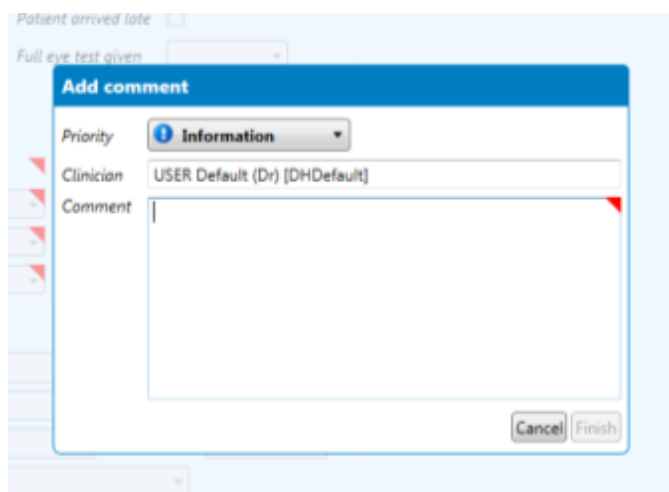


Figure 9

- To add a new note, select a priority from the drop down list, type your notes into the box that appears and click on the **[Finish]** button (figure 10).
- Click on the **[Next]** button to move on to the *Photograph capture* screen.

Capturing Photographs

At this point you will need to capture the photographs of the patient. Ensure your camera is connected and configured correctly. Please refer to your camera manufacturer documentation for more information on the camera operation.

✍ **Note:** Depending on the make and model of camera device, the method of capture may be different. OptoMize can talk to some cameras directly, others through a 3rd party interface supplied by the camera manufacturer and also by loading images from a folder location. For the purposes of this user guide two methods will be considered, direct connection and folder capture.

When the Photography capture screen loads, you will be ready to take the photographs, the photography capture screen is shown in figure 12.

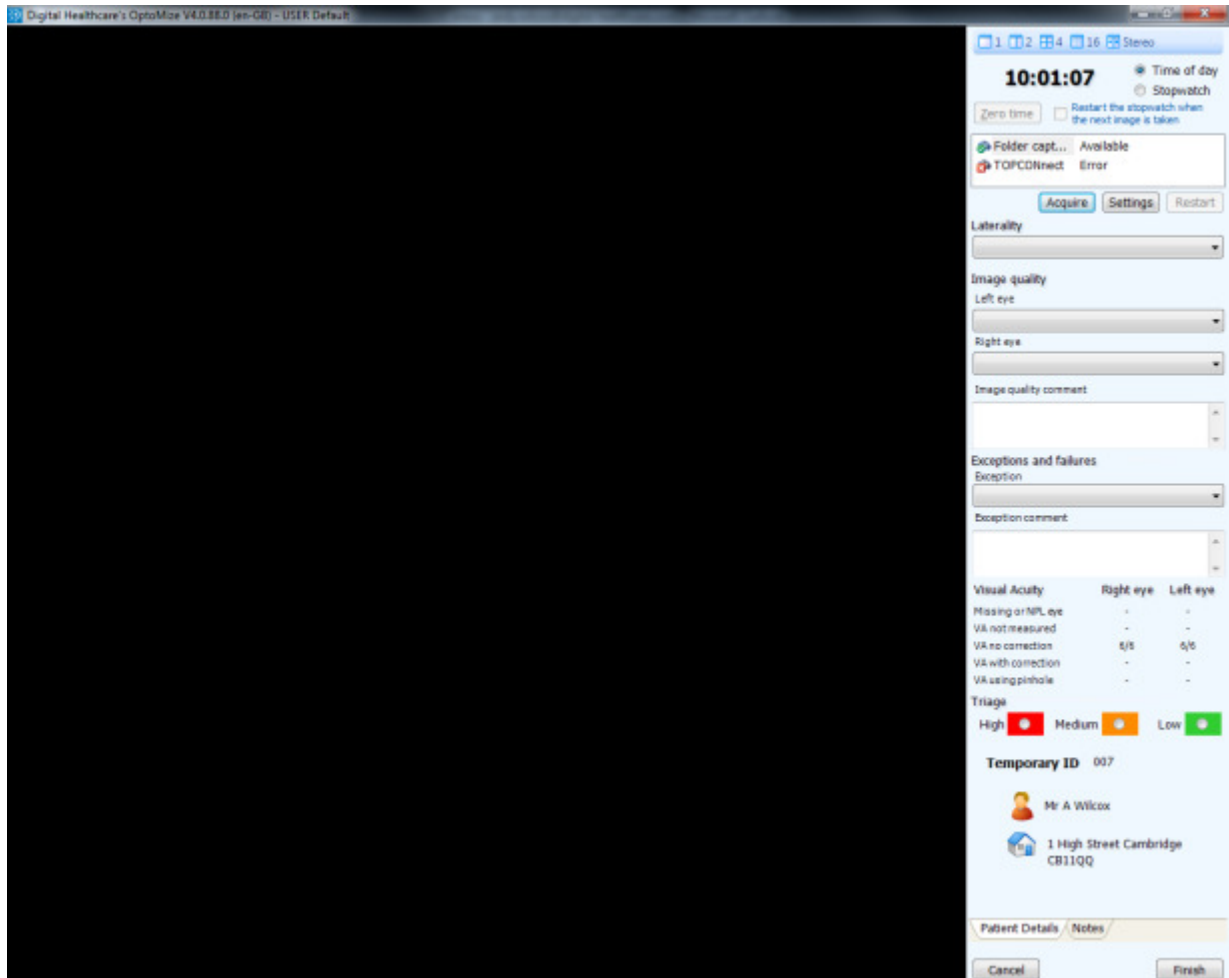


Figure 12

Integrated Cameras

- Begin taking the photographs, they will be loaded in to OptoMize automatically and be displayed in the main window (figure 13)

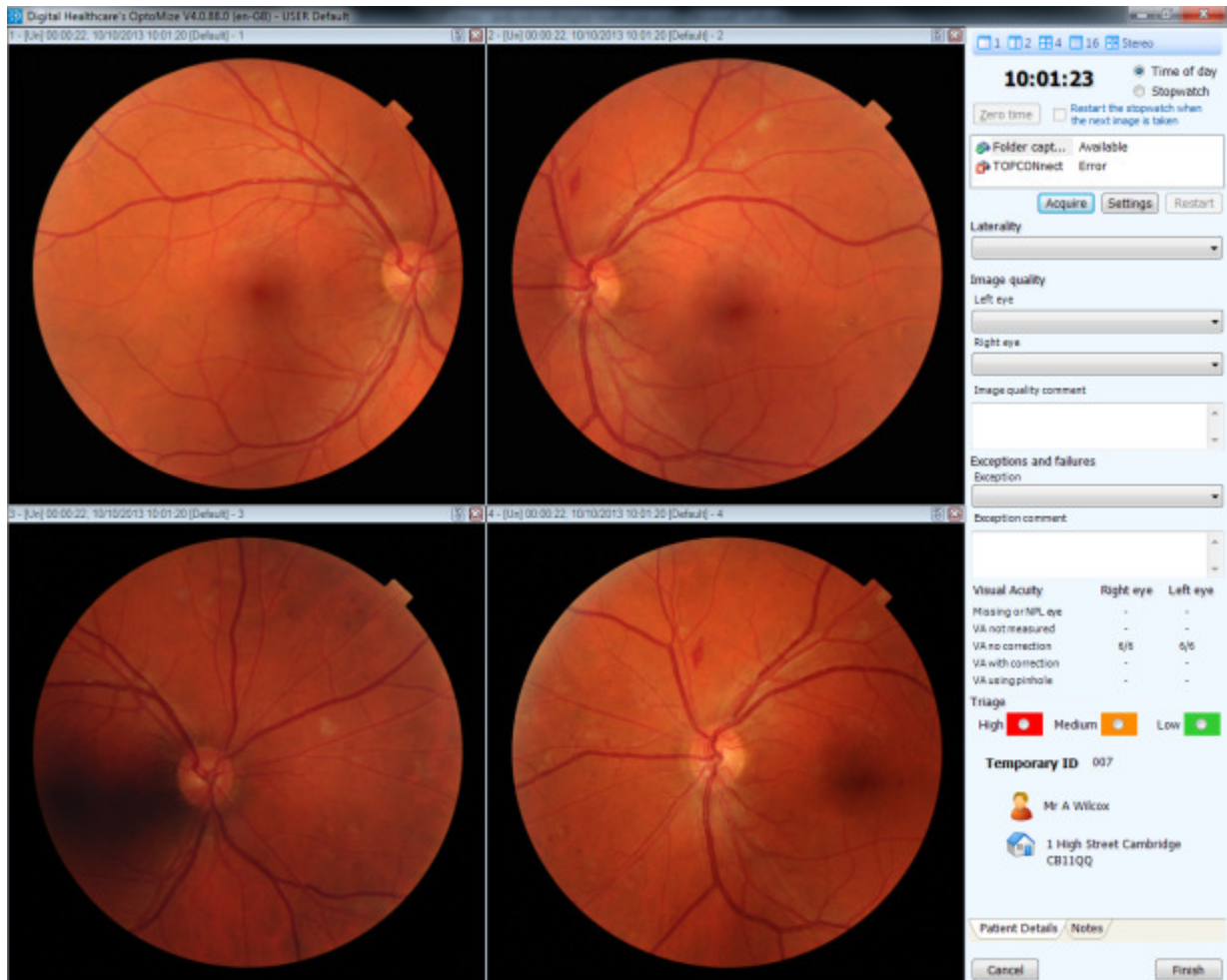


Figure 13

Folder capture

- Highlight the *Folder capture* options in the device list (figure 14)

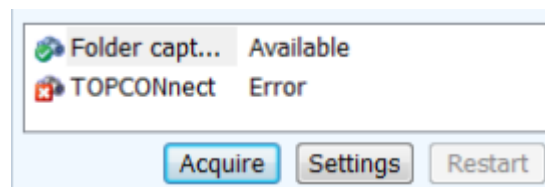


Figure 14

- Click on the **[Acquire]** button
- Browse to the folder that contains the photograph(s) you wish to load (figure 15)

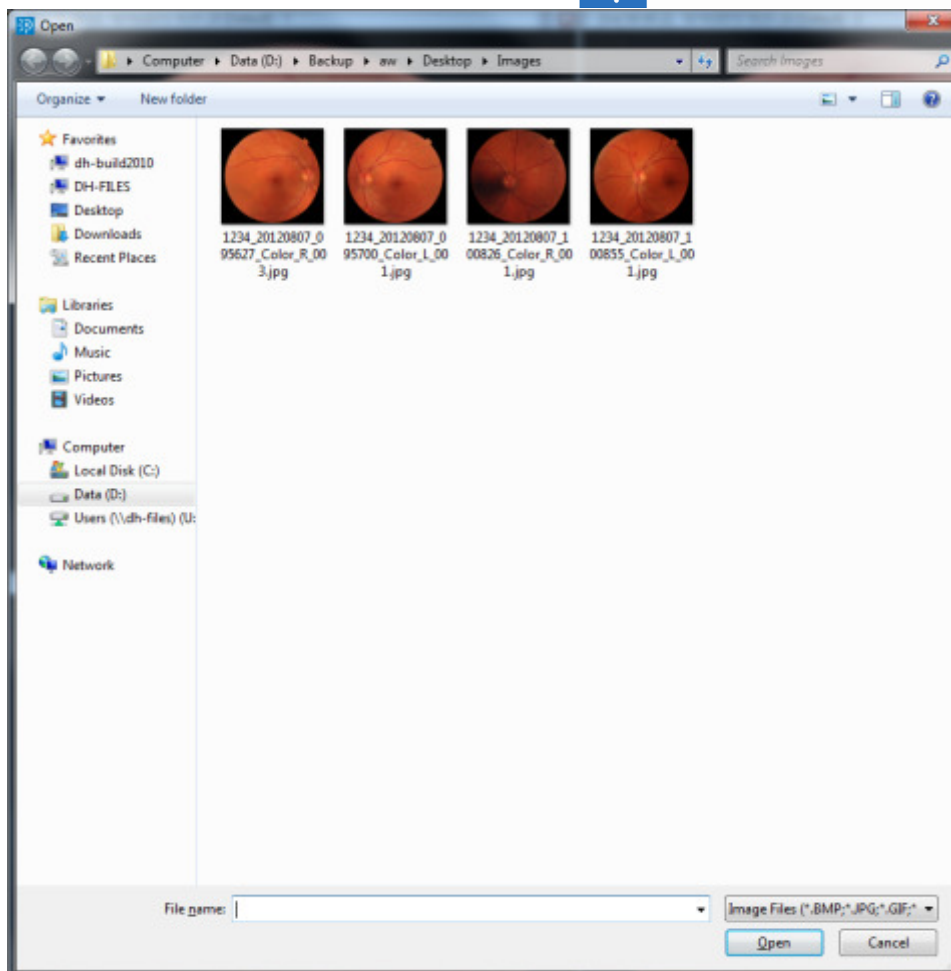


Figure 15

- Highlight one or more photographs depending on how many you have captured and wish to load and then click on the **[Open]** button.
- The photographs will be displayed in the main window (see previous example, figure 13)

Note: You can specify which eye each photograph was captured from; choose the relevant option from the *Laterality* drop down box (figure 16) before capturing each photograph.

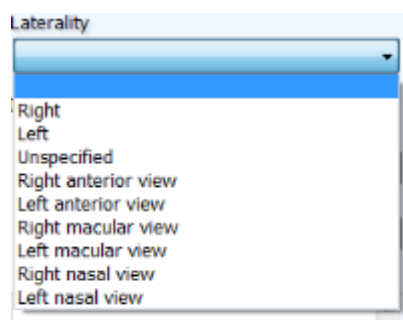


Figure 16

Note: You can amend the laterality of the image by clicking on the image with the secondary mouse button and choosing laterality from the menu.

Image View Controls

You can change how many images are displayed in the main area of the screen when capturing photographs. You can also double click on any image to view it as full screen. The options for number of images to view are located in the top right hand corner of the screen (figure 17).

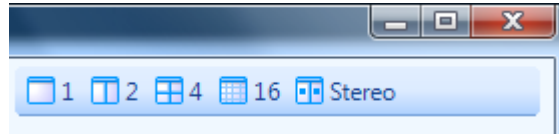


Figure 17

The options available are:

- 1 – Single image (figure 18)



Figure 18

- 2 – Pair of images side by side (figure 19)

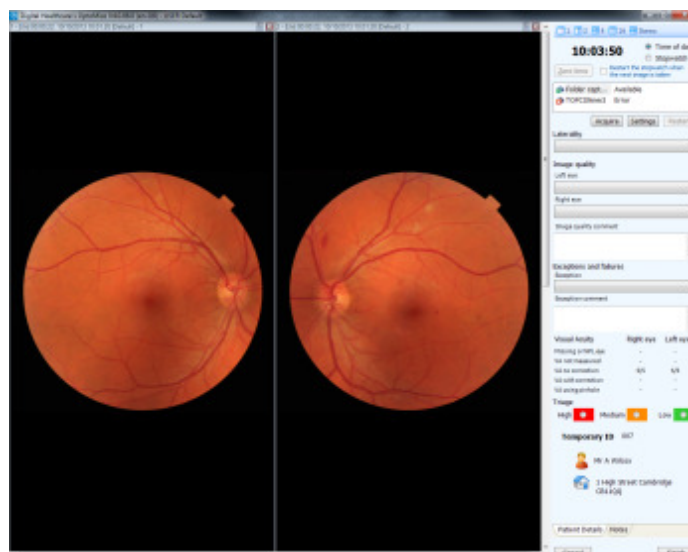


Figure 19

- 4 – 4 images tiled on the main screen, this is the default view in the photography screen (figure 20).

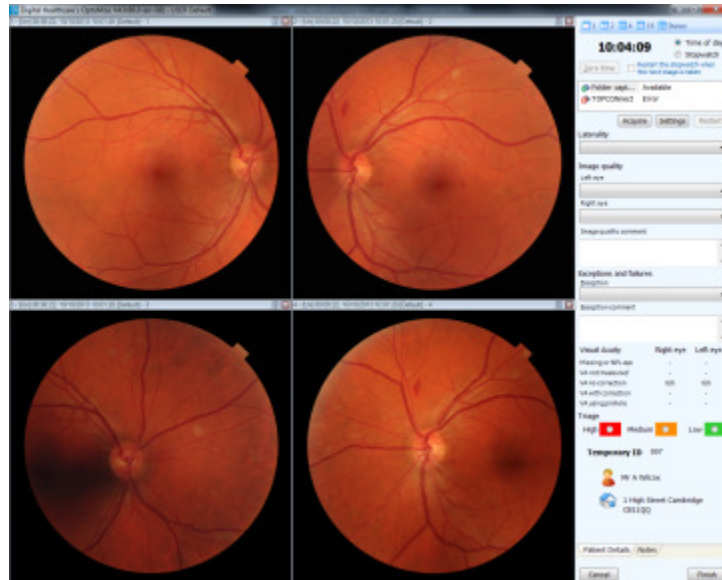


Figure 20

- 16 – Up to 16 images tiled on the main screen (figure 21)

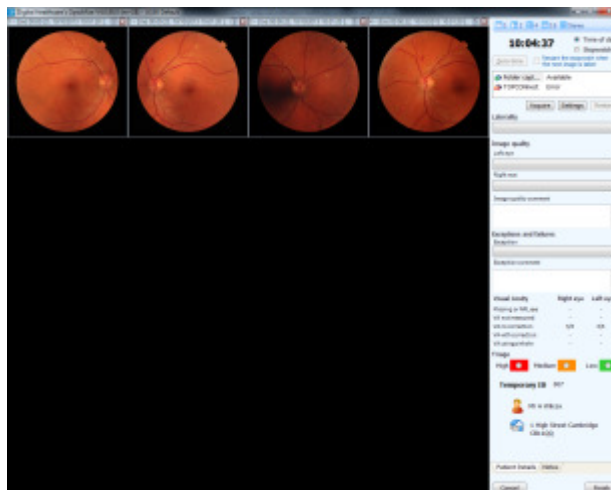


Figure 21

- Stereo Pair – The selected image and the next one displayed as a pair for stereo pair viewing (figure 22).



Figure 22

Triaging the Photographs

Once you have taken the photographs you will then need to triage them and specify if there has been a technical failure preventing the capture of photographs.

- To triage the photographs you have taken, click on the relevant triage level (figure 23)



Figure 23

Note: The triage level you choose will dictate which level within the primary grading queue the patient is put in to.

You also need to record an image quality for each eye,

- To provide an image quality for each eye, choose an option from the drop down list (figure 24)

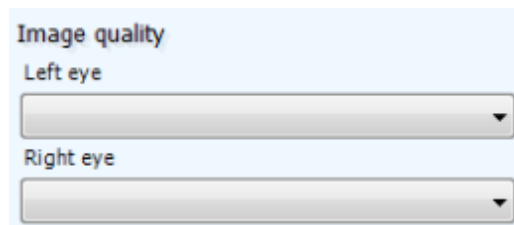


Figure 24

If you are unable to capture a suitable photograph using the camera due to non-clinical reasons and the patient would be suitable to be re-photographed, you can use the exception option to re-queue the patient for a new appointment.

- Choose an Exception reason from the drop down list (figure 25)

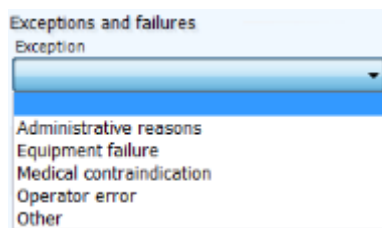


Figure 25

- To add notes to the patient record, click on the *Notes* tab at the bottom of the screen, click on the **[New]** button and then enter your notes. Click on the **[Apply]** button to save the notes or the **[Remove]** button to delete them (figure 26)

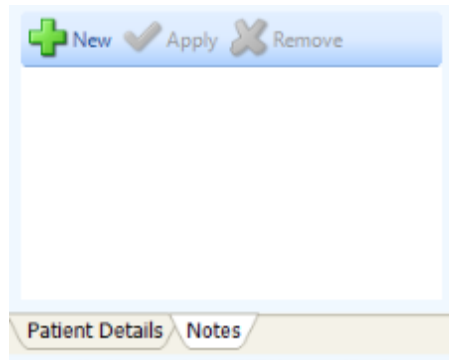




Figure 26

- When you have finished taking photographs, triaging the images and entering any additional information, click on the **[Finish]** button to save the images.
- You will now be returned to the *Main Activities* screen and be able to continue with the next patient.

 **Note:** You will not be able to click **[Finish]** until all relevant information has been entered, the compulsory information can vary depending on your configuration however the software will highlight the sections that require completing.

 **Note:** To cancel the session without saving any details or photographs, click on the **[Cancel]** button.

Changing the Instrument

Instruments (Image sources) are the method by which you configure OptoMize to talk to the camera you are using. These are separate from the Windows drivers that allow the camera to communicate with the computer itself.

Depending on what camera you have connected, you may need to add or change the instrument that OptoMize uses to talk to the camera, to alter the image source:

- Click on the *System Management* link on the *Main activities* screen
- Click on the **[Configure my instruments]** link (figure 27)

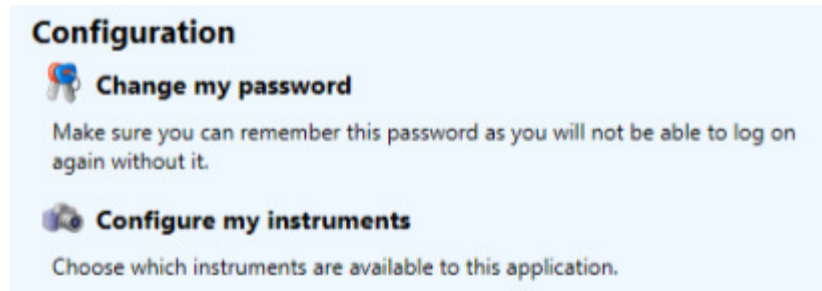


Figure 27

The window that appears will display all instruments currently enabled (figure 28)

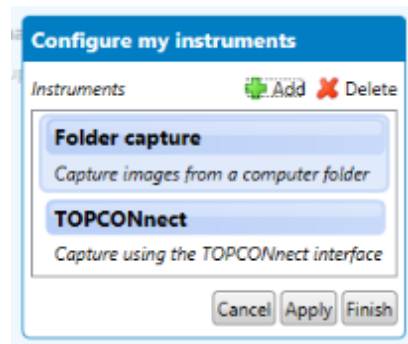


Figure 28

- Click on an existing instrument and then click on the **[Delete]** button to remove it
- Click on the **[Add]** button to add a new instrument, the following window will appear (figure 29):

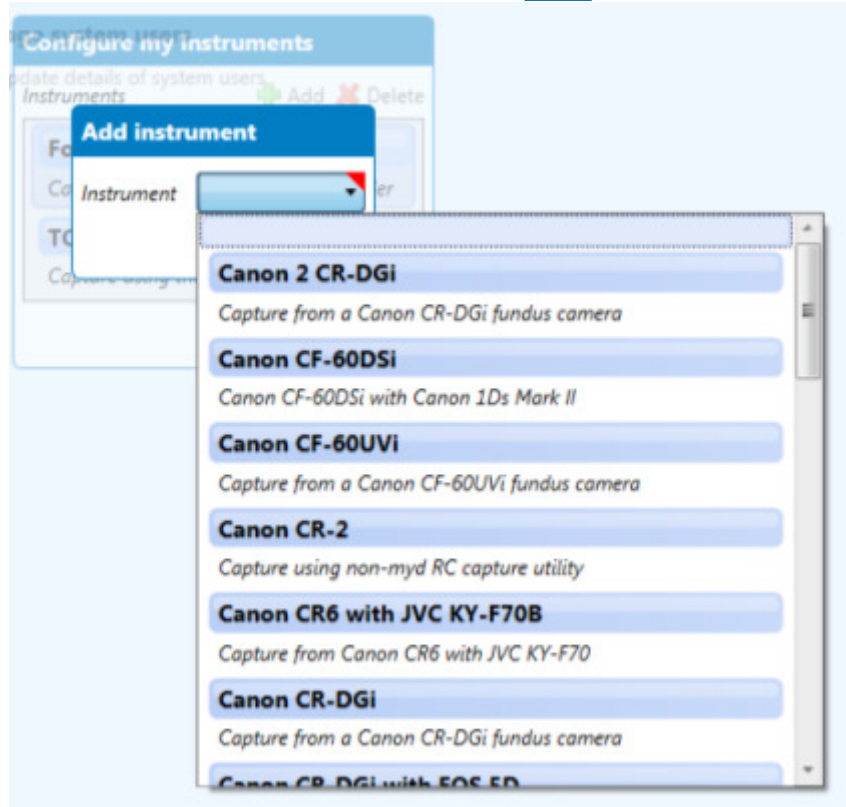


Figure 29

- Choose your instrument from the list and then click on the **[Finish]** button, then click on the **[Apply]** or **[Finish]** button to save your changes.

The new instrument will now be available to use in the photography screen.