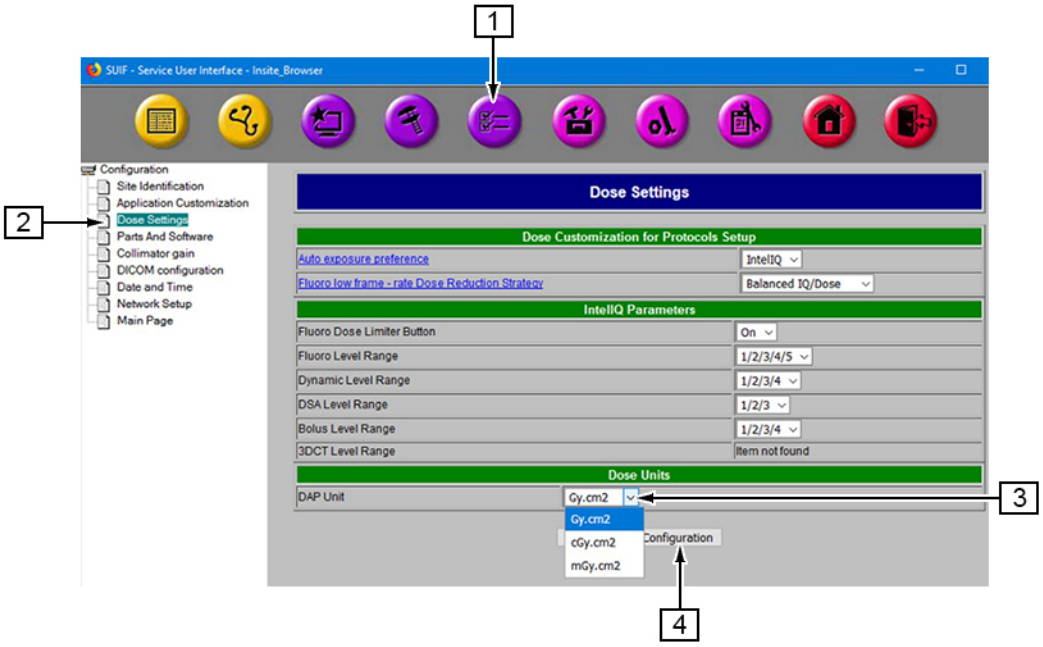
NOTE

The DAP unit can be configured to be displayed either in $Gy.cm^2$, $cGy.cm^2$ or $mGy.cm^2$.

1. Log in the system using a user account with access to the **SUIF**.
2. Open the **SUIF** and click on the **Configuration** button **[1]** in Navigation Area and then click on **Dose Settings** **[2]**.
3. Select the **DAP Unit** from the drop-down menu **[3]**.
4. Click on **Set Configuration** button **[4]** to validate the choice.
5. Restart the system to take into account the **DAP Unit** change.



7.2 How to use Worklist

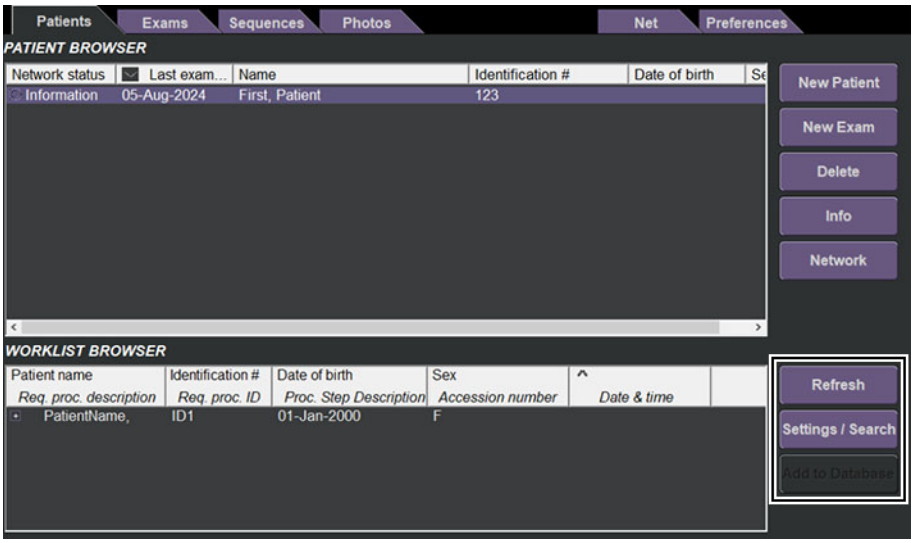
The worklist allows retrieving the patient demographic information from a worklist provider.

Retrieving the worklist

Go to Patient Browser.

The three worklist specific buttons are:

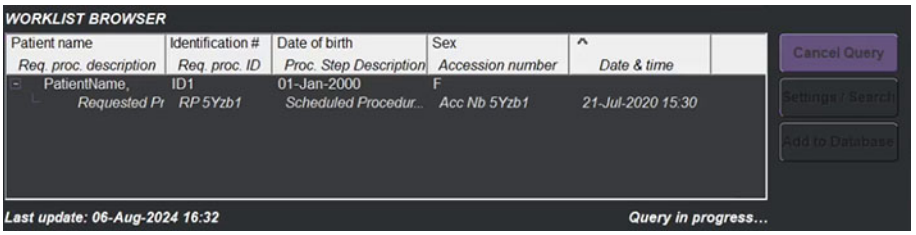
- **Refresh**: retrieves the worklist from the worklist provider.
- **Settings/Search**: opens the settings definition window.
- **Add to database**: allows creating patients/exams in the system database from the items selected in the worklist.



Pressing the **Refresh** button on the patient Browser retrieves the worklist.

While the query is in progress, the system remains fully available for other operations.

During the query, the **Refresh** button toggles to **Cancel Query**, allowing canceling the query in progress.

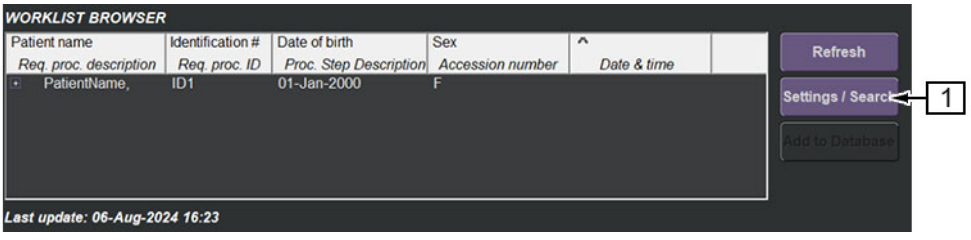


If the query fails, the last successful query result remains displayed.

The worklist can be sorted by patient name **[1]** or by scheduled start date and time **[2]** by clicking on the header row.

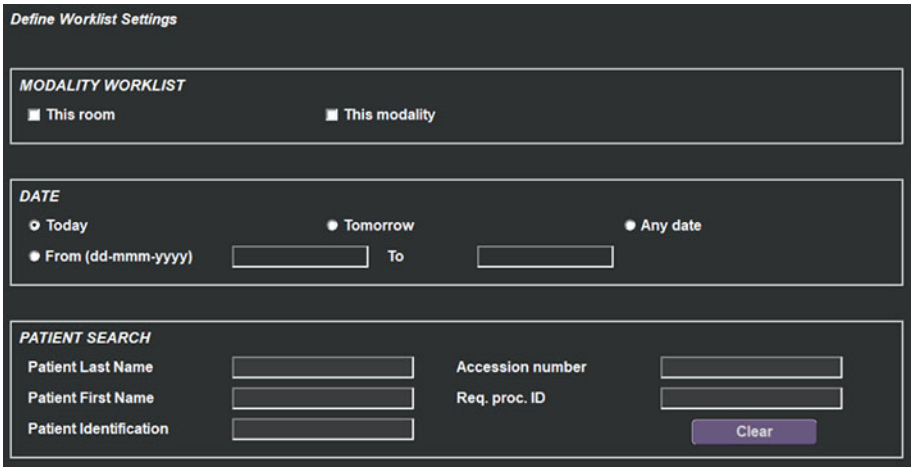
Worklist settings configuration

The worklist settings is configured from the **Settings/Search** button **[1]**.



Three matching criteria are available:

- Modality worklist,
- Scheduled exam date,
- Patient information (optional).



The system will retrieve items that satisfy the criteria defined in all three boxes. In the "Date" area, only one item can be selected.

The "Modality Worklist" criteria and the "Date" criteria are stored persistently on the system. The patient criterion is stored as long as the system is not re-booted.

MODALITY WORKLIST:

One or both or none of the checkboxes may be selected

- This room: the scheduled system's DICOM AE-Title matches the local dicom AE-Title.
- This modality: the modality of the scheduled procedure step is "XA", X-Ray angiography.
- Leaving both checkboxes unchecked: selecting this will have the effect of bypassing the scheduled system selection criteria, since it will always match.
- Both checkboxes checked: the scheduled system's DICOM AE-Title and the modality of the scheduled procedure step will be used for filtering.

NOTE
This selection must be used when a GE HealthCare Mac-Lab is used to retrieve the worklist.

NOTE
To see the local system's AE-Title, select Service from the Browser. In Service User Interface, choose configuration application, then DICOM.

DATE:

Any date: selecting this will have the effect of bypassing the date selection criteria, since it will always match.

From ... to: enter the selected dates in the following format: 01-Jan-2001.

PATIENT SEARCH:

Multiple matching criteria can be defined in this area.

For the last name and first name, the query will match if the name in the worklist provider contains the given name.

E.g.: querying for "John" will return "John", "Johnson" ...

The tab key navigates between the fields.

Refresh now button:

This has the same effect as **Apply** + **Refresh**.

Apply button:

The window is closed. The settings definition is saved.

Cancel button:

All edits are discarded. The window is closed.

Creating patients from worklist

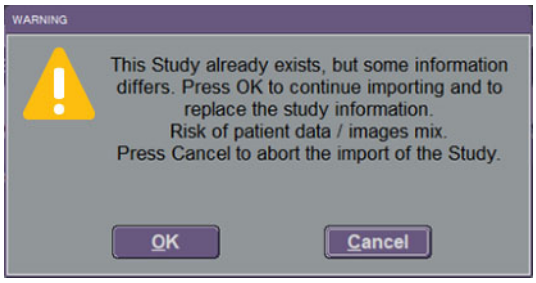
Creating patients from the worklist can be done by:

- Clicking on the **Add to database** button.
- Double clicking a line from the worklist Browser.
- Dragging and dropping a line from the worklist Browser into the patient Browser.

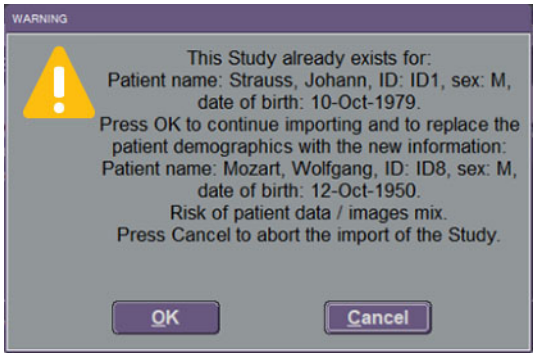
NOTE
In case some patient/exam information of the patient to be imported already exists in the system database, but belongs to another patient/exam, a pop up window will be displayed to warn users about the “risk of patient/exam data/images mix”.

Three scenarios can occur:

1. Same patient information but different exam information.

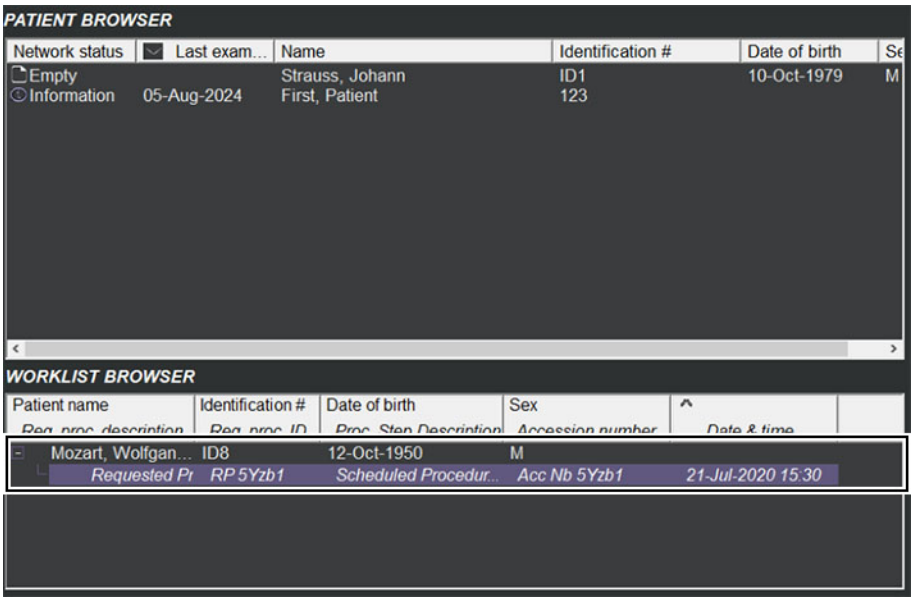


2. Different patient information but same exam information.
3. Same patient information with study information belonging to another patient.



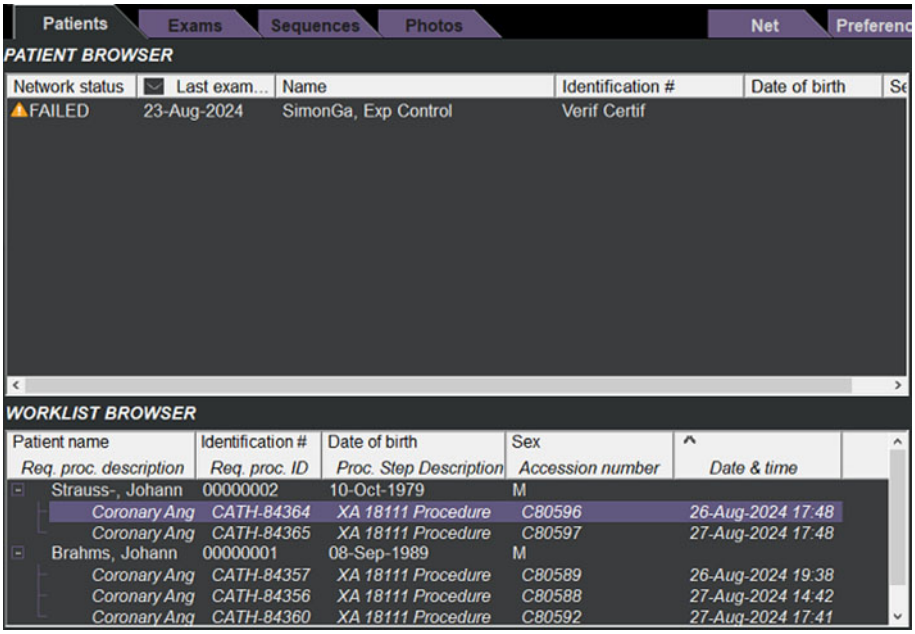
Case 1: The patient has only one scheduled procedure step:

Selecting the patient line or the scheduled procedure step line has the same effect. It creates the patient with one exam in the database.

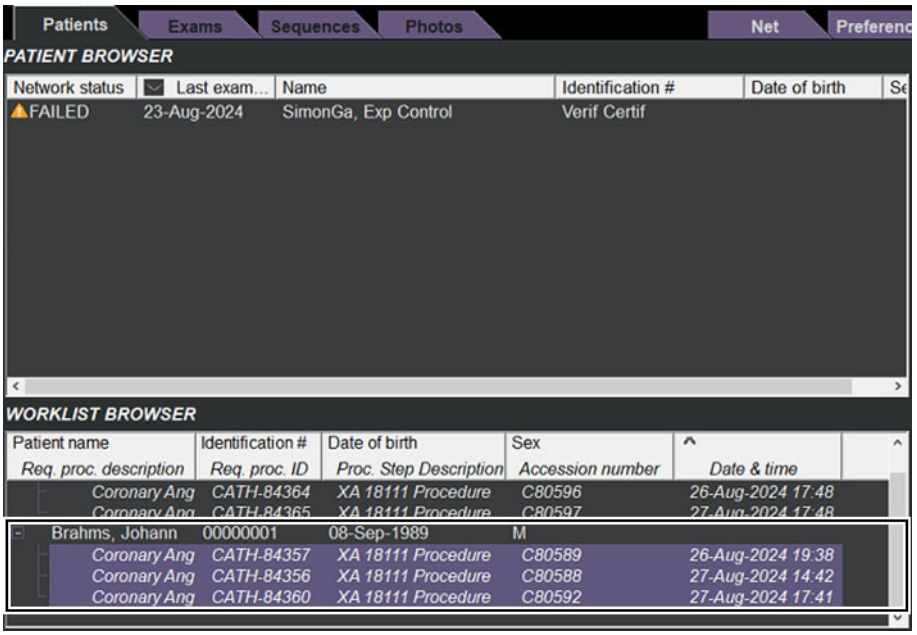


Case 2: The patient has more than one scheduled procedure step:

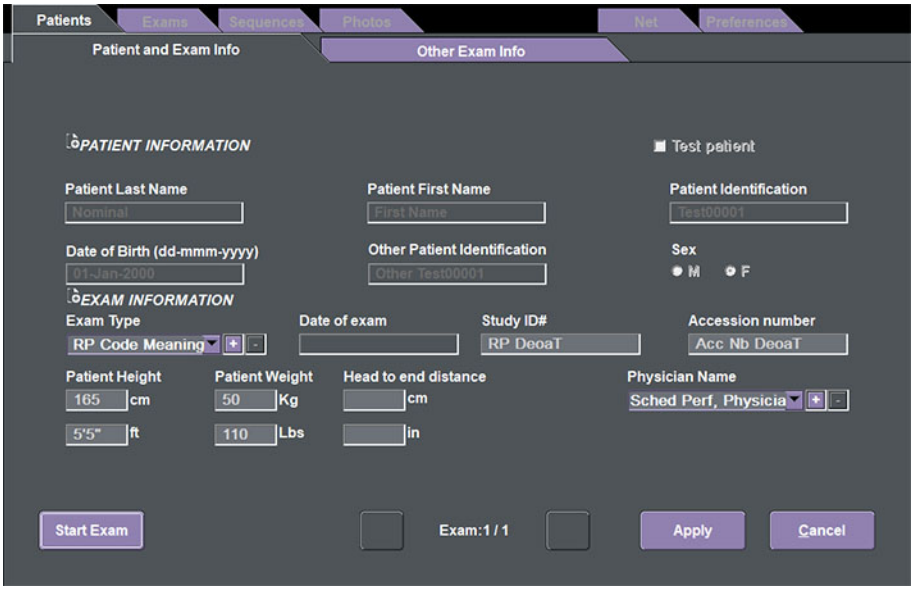
- To create one exam from each procedure step, select and import each procedure step individually.



- Selecting and importing the patient line or a group of scheduled procedure steps will import the first procedure step.



Importing items from the worklist will open the patient and exam info screen, pre-filled with the information from the worklist provider.



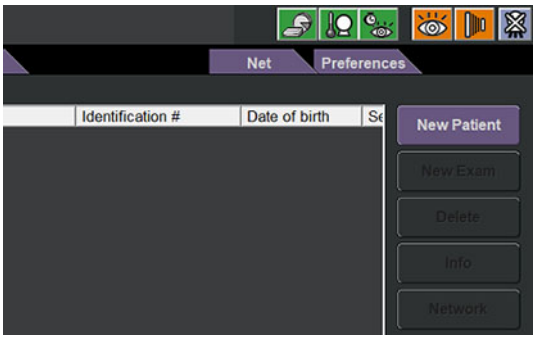
To ease the patient identification in Review Stations and Archive Stations, the patient demographic information is not editable if it was created from the worklist (patient last and first name, patient ID, date of birth, other patient identification and sex). If editing is required, it should be done on the worklist provider, then the worklist should be refreshed and the patient re-imported.

7.3 How to start, abort or end a procedure, edit Patient Information

How to prepare for a New Patient Acquisition

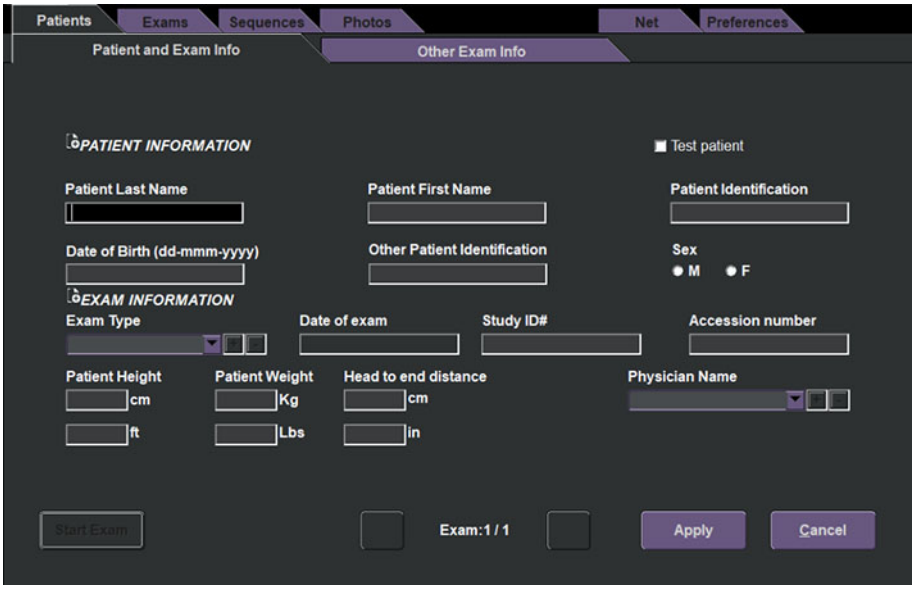
NOTE
Always check the disk space available before performing new procedures.

NOTE
Before patient creation, we recommend to delete patients whose data has been pushed/archived.



To enter information for a new patient:

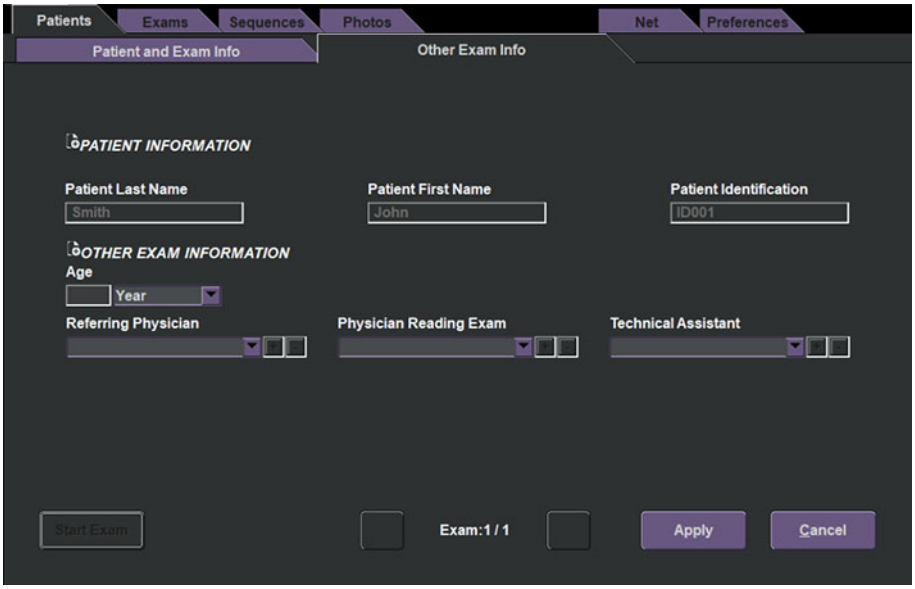
- Click on the **Patients** tab at the upper left of DL Screen.
- Select **New Patient** from the PATIENT BROWSER. The **Patient and Exam Info** window appears:



Fill in the patient information. Patient Name and Identification are required fields. If they are left blank, an error message appears.

- Head to end distance. (See 11.5 Dose Map (Option for system with Omega or InnovaIQ Table) on page 378).
- Physician Name and Exam Type are editable list boxes. Select from the list or type in the value. **+** will add values to the list for future use, **-** will remove them.

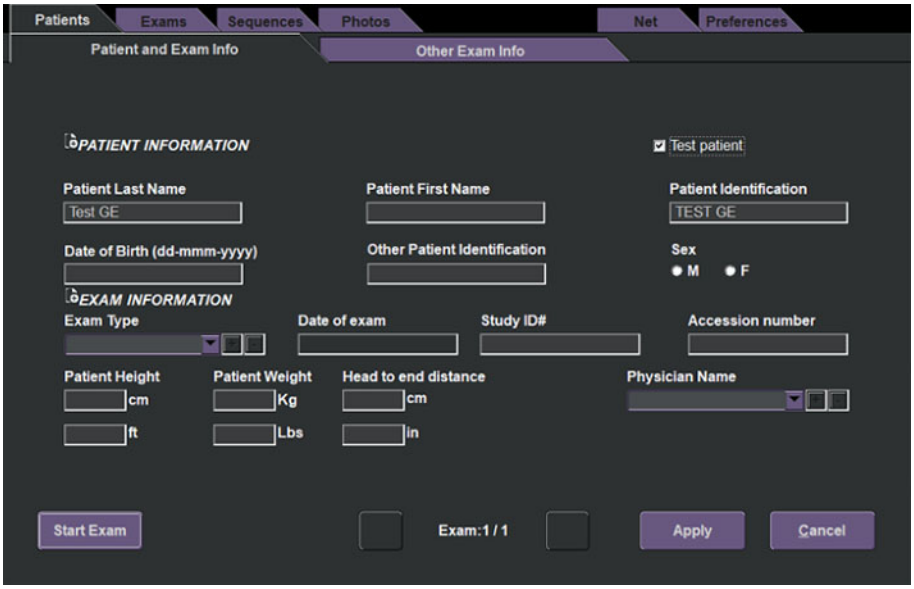
- Click on the **Other Exam Info** tab - Fill in the available information:



- Select **Apply** to create patient and return to Patient Browser.
- Select **Cancel** to cancel patient entry.
- Select **Start Exam** to begin a procedure.

NOTE
If the IGS system is connected to a Patient Monitoring/Scheduling/Reporting system, the Start Exam information is also sent to that system using the DICOM `MPPS in progress` message.

In case of test acquisitions needed, select the **Test Patient** on top right of the menu. Patient Last Name and Patient Identification fields will be automatically filled with **Test GE** information.

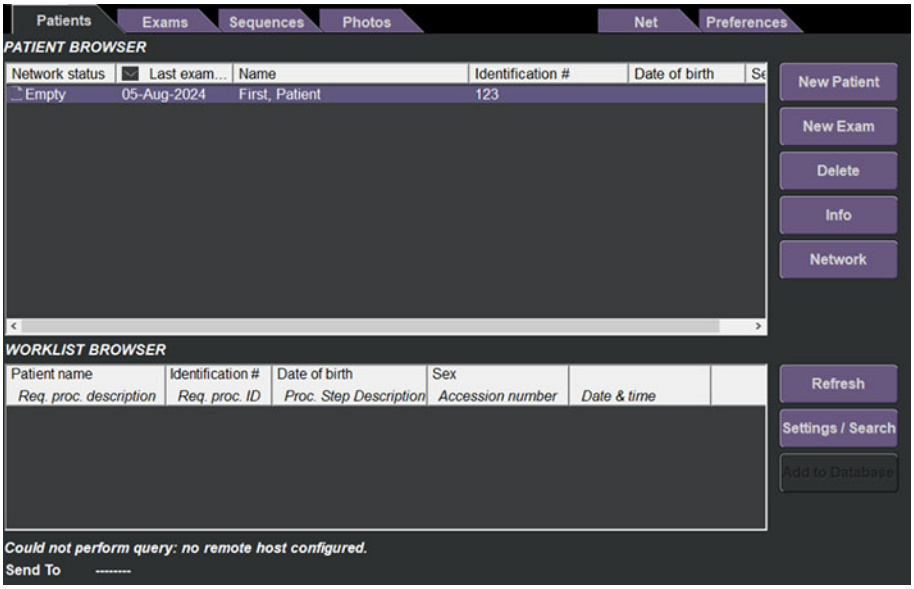


How to start a procedure on patient already in Patient list

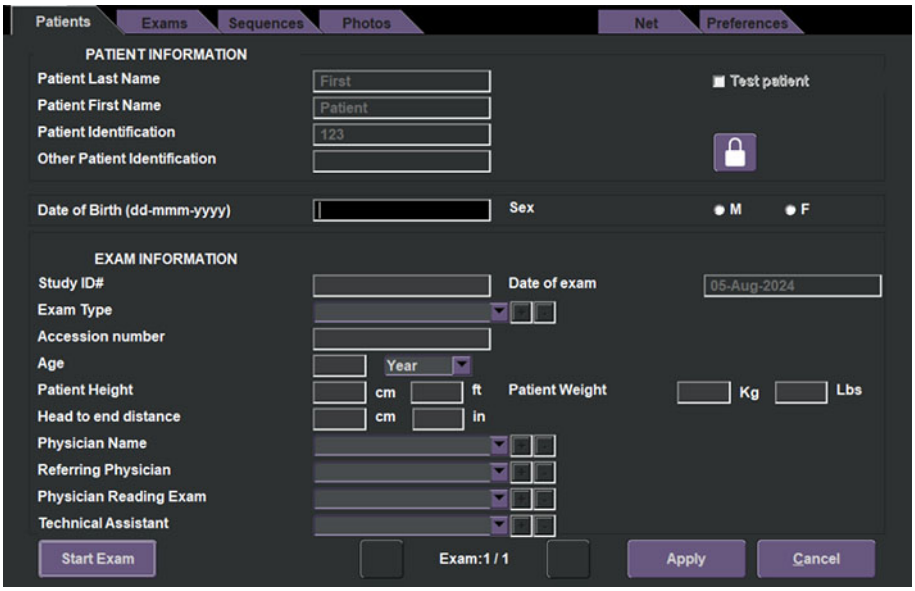
- Click on the **Patients** tab at the upper left of DL Screen.
- Select patient's name in the Patient Browser.
- Select **New Exam** to begin a procedure.

How to modify Patient Information

The **Info** button allows to review and modify the patient's name and identification as well as the exam information that has been entered for a procedure.

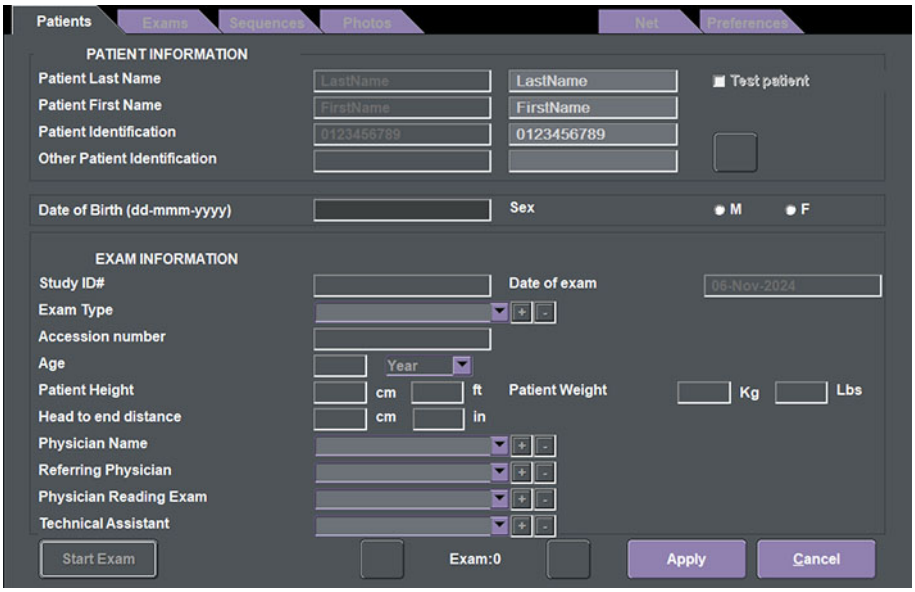


- Click on the **Patients** tab at the upper left of the DL screen.
- Select **Info** from the PATIENT BROWSER. The **Patient/Exam Info** window appears:



- Click on the lock icon  to modify patient information.

- New and editable fields will appear and can be modified while the original patient information is still shown on the left side.



NOTE
If the patient information was retrieved from a worklist, it cannot be modified and the patient and identification fields will remain grayed out. Only information manually typed in can be modified.

- Click on **Apply** to accept the changes.
- Click on **Cancel** to exit with no changes.
- Click on **Start Exam** to accept and begin the procedure.

How to End an Exam

When X-Rays are no longer required, select END EXAM in the upper right corner of the SEQUENCE BROWSER screen or on the Touch Panel. After this:

1. No exposures can be made.
2. The image graphics on the live and reference display are erased.
3. The image monitor will be blank.

At this time, any patient's images can be viewed on the system.

If the IGS system is connected to a Patient Monitoring/Scheduling/Reporting system, the End Exam notification is sent to that system using `MPPS Completed` message.

If the IGS system is connected to a DICOM Dose Structured Report Receiving system and some exposures is taken, the Dose Information will be exported to that system at End Exam.

How to Abort an Exam

When a wrong exam is started and needs to be aborted, select ABORT EXAM in the upper right corner of the SEQUENCE BROWSER screen.

After this:

1. No exposures can be made.
2. The image graphics on the live and reference display are erased.
3. The image monitor will be blank.

If the IGS system is connected to a Patient Monitoring/Scheduling/Reporting system, the Abort Exam notification is also sent to that system using `MPPS Discontinued` message.

If the IGS system is connected to a DICOM Dose Structured Report Receiving system and some exposures is taken, the Dose Information will be exported to that system at Abort Exam.

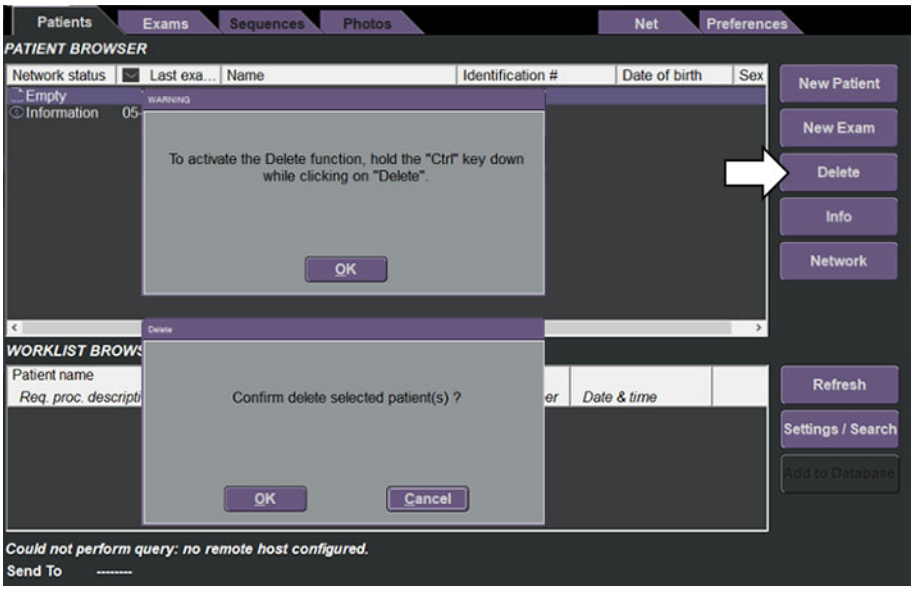
7.4 How to Transfer or Delete data from Digital System

7.4.1 How to delete

NOTE
Before erasing any data from the DL Screen, always check that all data was successfully pushed and available on the AW Workstation.

Data can be deleted at the PATIENT/EXAM/SEQUENCE/PHOTO level.

Figure 7-2 Delete Patient



- Click on the **Patients** tab at the top left of DL screen to select the PATIENT BROWSER. By a simple click; select the element(s) you want to delete.

  NOTE
  You can select multiple elements:

  - Using **Shift** + left mouse button for contiguous elements.
  - Using **Control** + left mouse button for non-contiguous patients.
  - While holding the **Control** key, click on the **Delete** key. The message `Confirm Delete <element>` will appear.
  - Select **Cancel** key to cancel deletion.
  - Select **OK** or press the **Enter** key to confirm deletion.

NOTE
If not all of the sequences of a patient or an exam have been pushed/archived, another confirmation pop-up will appear. If the IGS system is connected to a Patient Monitoring/Scheduling/Reporting system and at least one MPPS message was not sent yet, a similar pop-up will be displayed indicating “MPPS data is not yet sent” and asking to confirm the deletion. If DICOM Dose Structured Report is configured and at least one DICOM Dose Structured Report message was not sent yet, a confirmation pop-up is displayed to user indicating “Dose Report is not yet sent” and asking to confirm the deletion.

If one of the sequences has not been pushed/archived, another pop-up "Sequence was not sent to network/archived yet. Confirm delete sequence?" will appear.

If one of the photos has not been pushed/archived, another pop-up "Photo was not sent to network/archived yet. Confirm delete photo?" will appear. Select **OK** (or press the Enter key) to confirm deletion. Select **Cancel** key to cancel deletion.

- After a selection is made, the BROWSER will be updated and redisplayed.

7.4.2 How to Network Images to a Workstation, Archive Stations

You can manually or automatically transfer exams, sequences or photos to one or several hosts (workstation, PACS...).

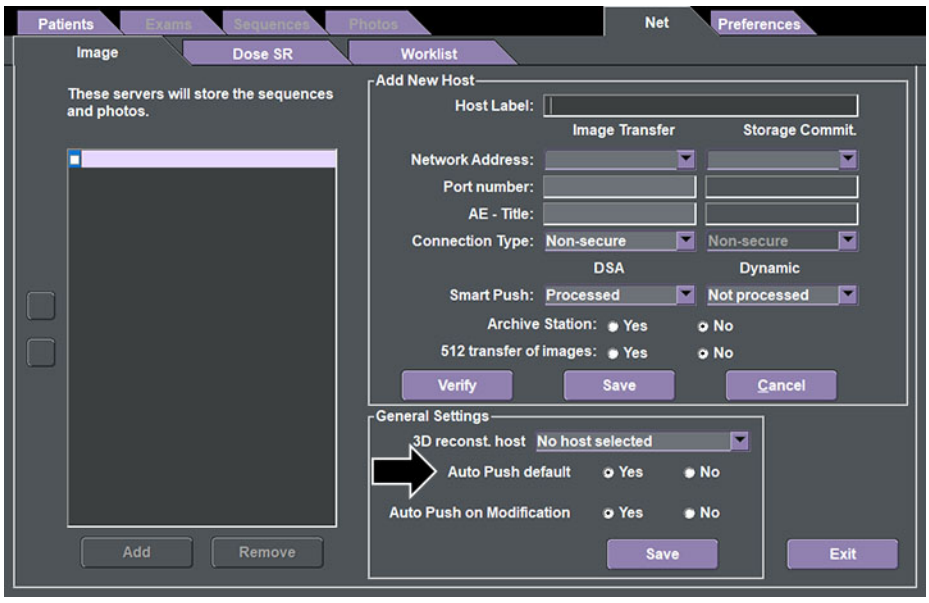
NOTE
In order to optimize data security, it is strongly recommended to always work in Auto Archive mode.

7.4.2.1 Auto Archive

The **Auto Archive** button **[1]** on the DL keypad activates the auto transfer of sequences or photos as they are acquired.

Auto Archive is active when the button is illuminated. If a manual transfer is desired, a single push of the illuminated **Auto Archive** button will deactivate the Auto Archive transfer.

It is possible to preset the Auto Archive to ON or OFF by default in the Browser. By default, the Auto Archive is set to ON. The update will require a system restart.

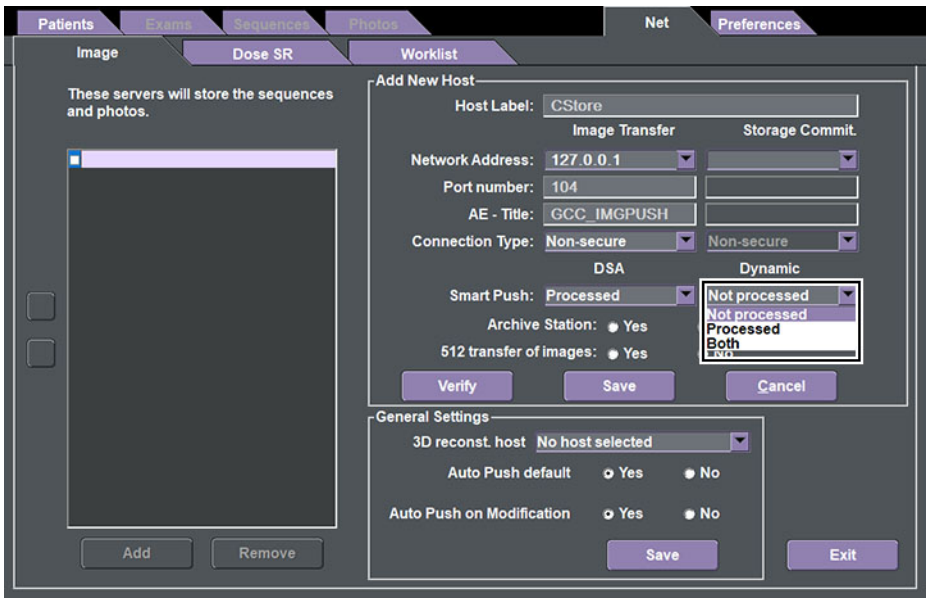


NOTE

Transfer will pause when there is a fluoro, record or review in progress.

7.4.2.2 Smart Push

The Smart Push function is only available to users with a certain level of privileges. Contact your system administrator if you need to modify the existing configuration.



The following options are available, and configured by the system administrator according to your needs:

DSA and Single Shot

- **Not processed**: Pushes to the host a DICOM file that will be displayed on AW stations with subtraction, sharpening and user-adjusted brightness/contrast. However, other PACS and review stations cannot display these GE HealthCare proprietary processings. Image denoising is burned in the image so it is applied in all cases. Single-frame DSA acquisitions (including Single Shot) are pushed without subtraction.
  It is recommended to use this option when an AW is used to perform post-processing, such as pixel shifting, landscape adjustment, or sharpening changes
- **Processed**: Pushes to the host a DICOM file with all the processing burned in, that can be displayed by all DICOM-compliant equipment. However, this limits the post-processing options available on AW.
  It is recommended to use this option when not performing post-processing on an AW.
- **Both**: Pushes both the processed and not processed DICOM files to the same host.

Dynamic

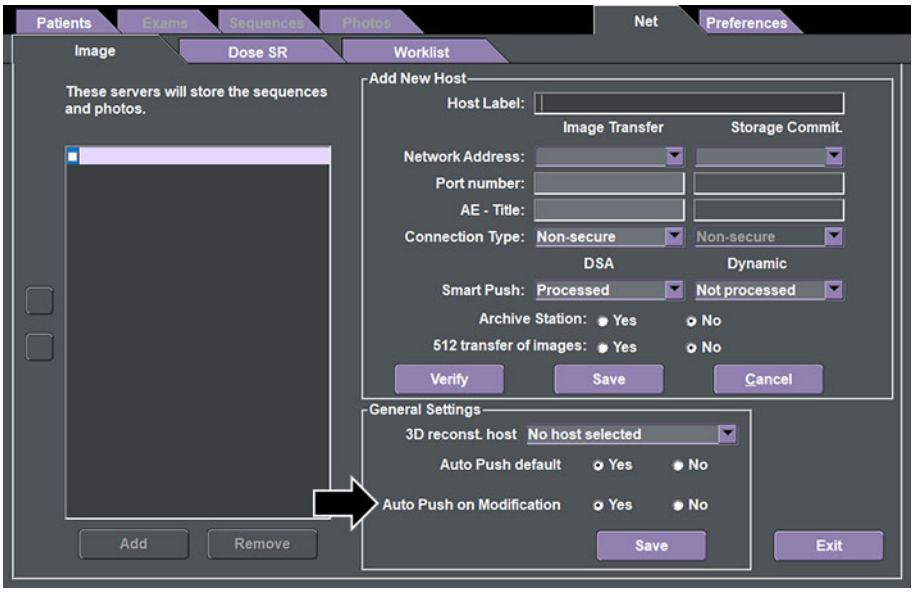
- **Not processed**: Pushes to the host a DICOM file that will be displayed with sharpening on an AW station. However, other PACS and review stations cannot display this GE HealthCare proprietary processing.
  It is recommended to use this option when an AW is used to adjust the sharpness of the image after the acquisition.
- **Processed**: Pushes to the host a DICOM file with the sharpening burned in.
  It is recommended to use this option when not using an AW station, or when the AW is not used to change image sharpness.
- **Both**: Pushes both the processed and not processed DICOM files to the same host.

7.4.2.3 Auto Push on Modification

Auto Push on Modification activates the automatic transfer of sequences or photos immediately after the sequence/photo name, patient orientation or review parameters are modified.

It is possible to preset the **Auto Push on Modification** to ON or OFF on DL Browser. By default, the **Auto Push on Modification** is set to ON. The update will not require a system restart.

Users can select **Auto Push on Modification** independently of Auto Push default selection.



NOTE
Auto Push on Modification will not initiate the network transfer if the configured hosts are not selected.

Auto Push on Modification with sequence or photo name change

If **Auto Push on Modification** is enabled, changing the sequence or photo name (refer to Sequence Browser on page 294 and Photo Browser on page 295) will automatically initiate the network transfer of the sequence/photo to all the selected hosts (Workstations, PACS, etc.).

Auto Push on Modification with patient orientation change

If **Auto Push on Modification** is enabled and Display/Transfer Patient Orientation on DL Browser Preference tab is set to Yes, changing the patient orientation (refer to Modification of Patient Orientation on page 230) of a sequence or photo will automatically initiate the network transfer of the sequence/photo to all the selected hosts (Workstations, PACS, etc.).

NOTE
Automatic network transfer due to patient orientation change will NOT be initiated if Display/Transfer Patient Orientation on DL Browser Preference tab is set to No.

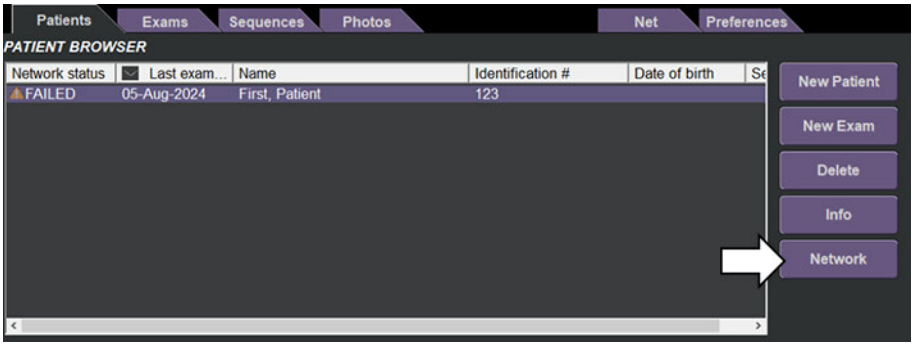
7.4.2.4 How to Network

- Select the desired element from the PATIENT / EXAM / SEQUENCE or PHOTO BROWSER.

NOTE
You can select multiple patients:

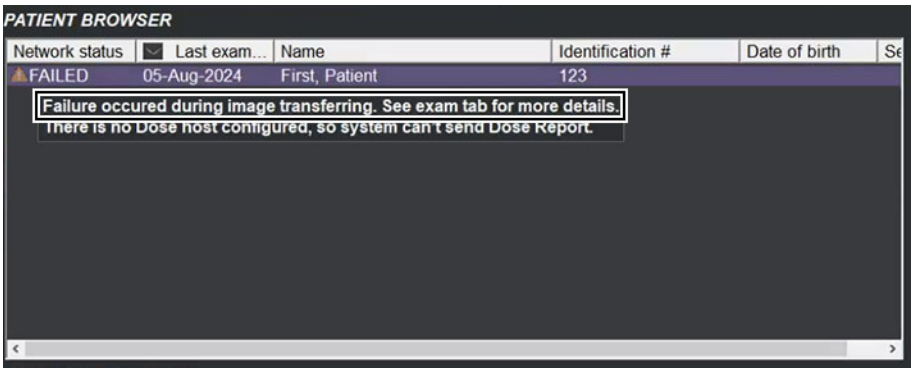
- Using **Shift** + left mouse button for contiguous selection of patients.
- Using **Control** + left mouse button for non-contiguous selection of patients.

- Click on the **Network** button on the right of the DL screen.
- Wait for the images to arrive on the remote host.



7.4.2.5 How to check the status of Network Image operations

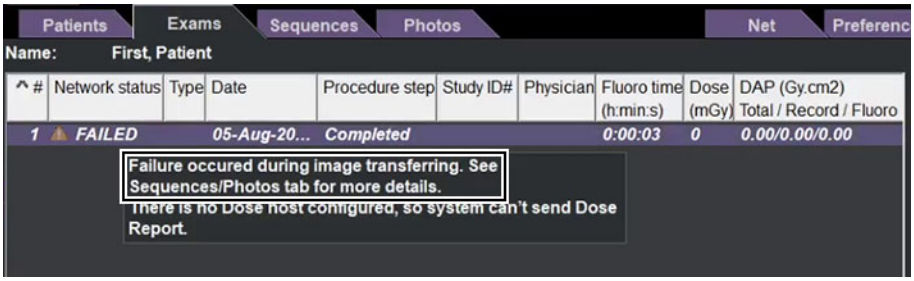
CASE 1: If the Network status at Patient Browser is FAILED, then place the mouse over the FAILED status. If the tool-tip displays: `Failure occurred during image transferring. See Exam tab for more details.`



Go to the EXAM Browser of that Patient.

If any Exam displays Network status as "FAILED", place the mouse over the FAILED status.

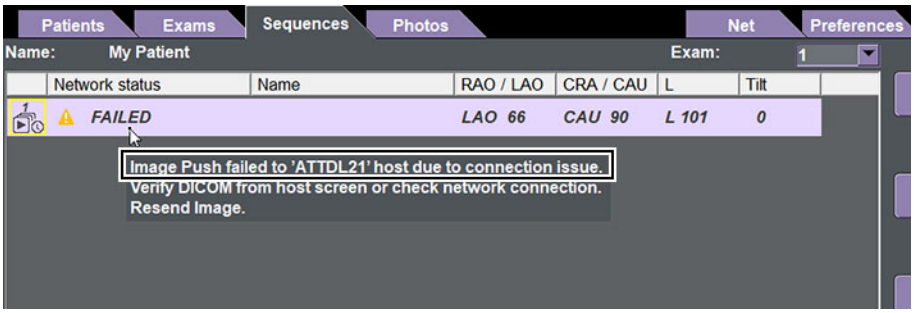
If the tool-tip displays `Failure occurred during image transferring. See Sequences/Photos tab for more details.`



Go to the SEQUENCE and PHOTO Browser of that Patient - Exam.

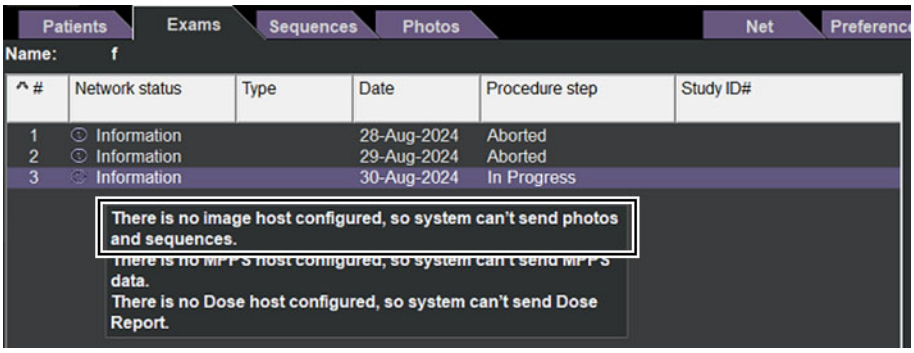
If any Sequence or Photo displays Network Status as "FAILED", place the mouse over the FAILED status.

Follow the tool-tip instructions to recover the error.



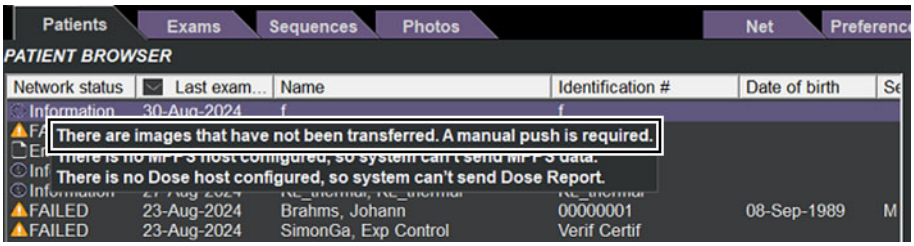
CASE 2: If the Network status at Patient Browser is INFORMATION, then place the mouse over the INFORMATION status.

CASE 2.1: If the tool-tip indicates `There is no image host configured`, then configure and select an Image push host.



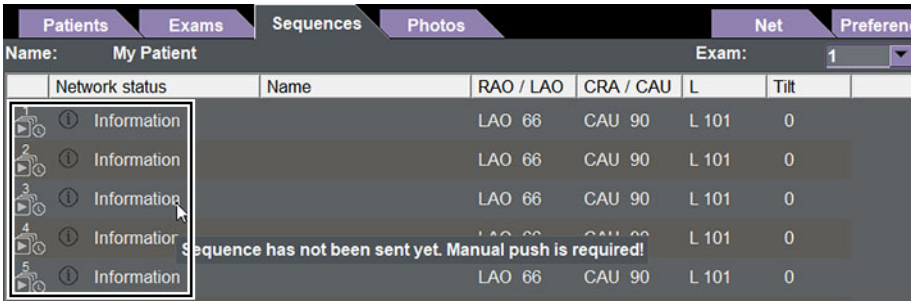
CASE 2.2: If the tool-tip indicates `There are unsent images. Manual push is required`, then go to **Exams** tab.

In the **Exams** tab, click on the network status for the exam with "Information" status.

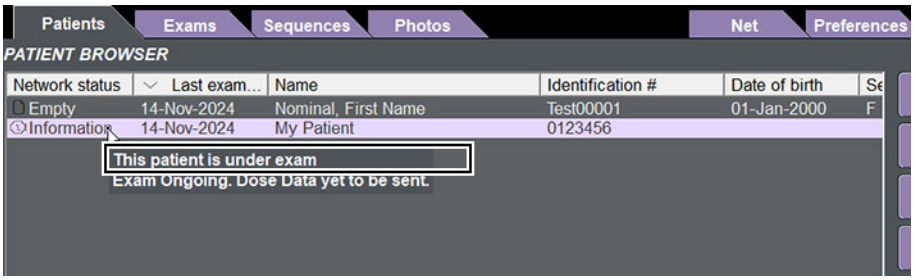


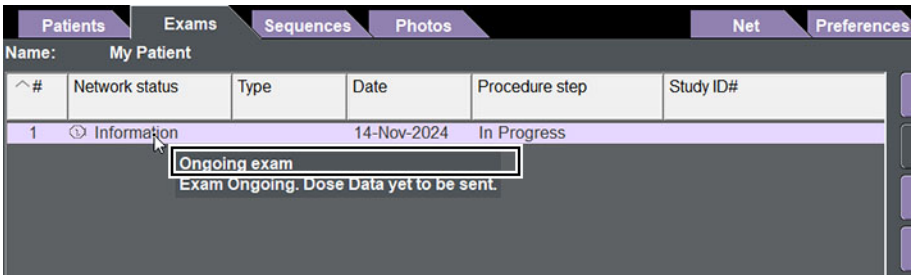
If the tool-tip indicates `There are unsent images`, then go to **Sequences** and **Photos** tab.

Manually push the unsent Images.



CASE 2.3: If tool-tip indicates `Patient is under exam`, it implies that the exam is ongoing.

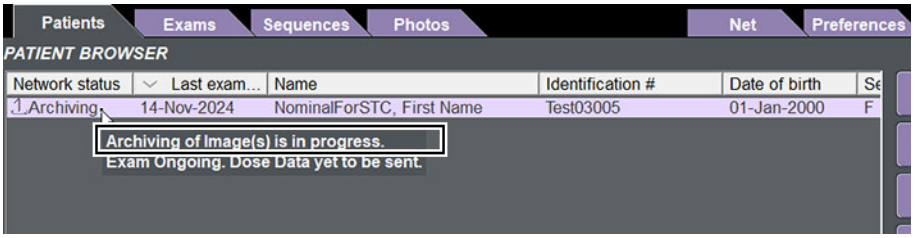




CASE 3: If the Network status at Patient Browser is SENDING, then place the mouse over the SENDING status. If the tool-tip indicates `Sending Images is under way`, then image push is underway. Need to wait for the network operation to end.

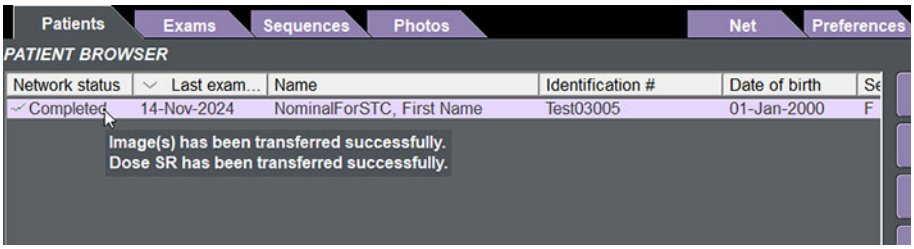
CASE 4: If the Network status at Patient Browser is ARCHIVING, then place the mouse over the ARCHIVING status.

If the tool-tip indicates `Archiving Images is under way`, then image archival is underway. Need to wait for the network operation to end.



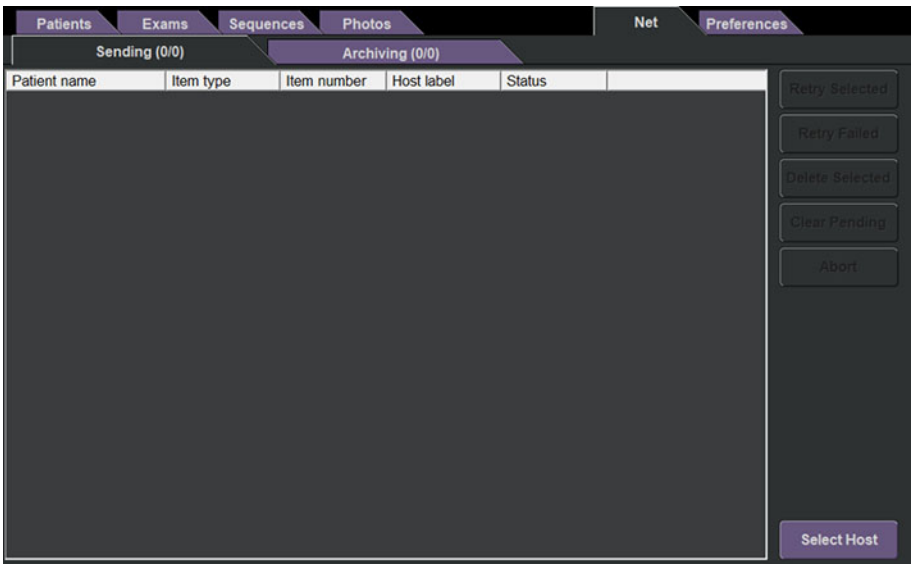
CASE 5: If the Network status at Patient Browser is COMPLETED, then place the mouse over the COMPLETED status.

If the tool-tip indicates `Images have been transferred successfully`, then it implies successful transfer of all images for the selected patient.

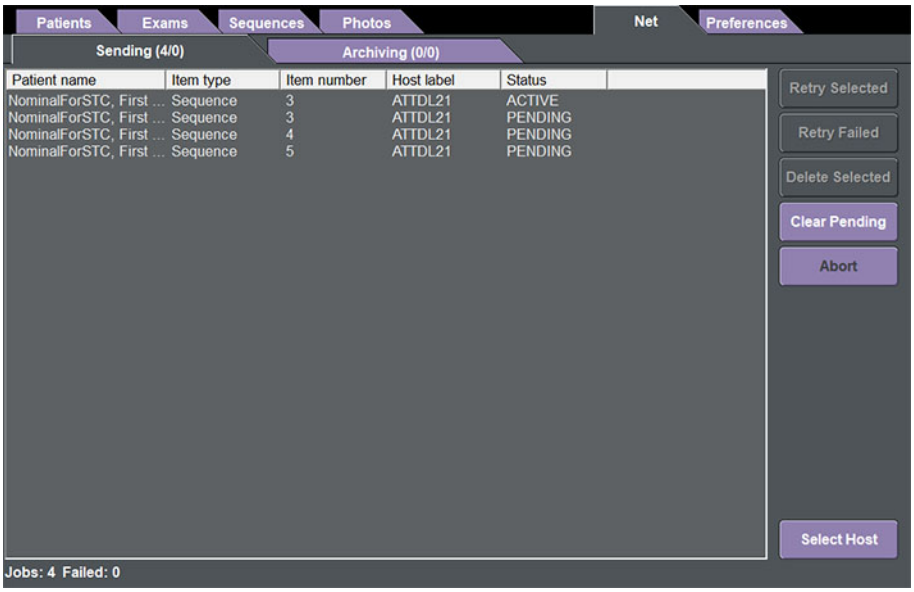


7.4.2.6 Network Queue Management

Click on the **Net** tab of the DL screen to open the SENDING or (if any) ARCHIVING queue.



SENDING/ARCHIVING Queues



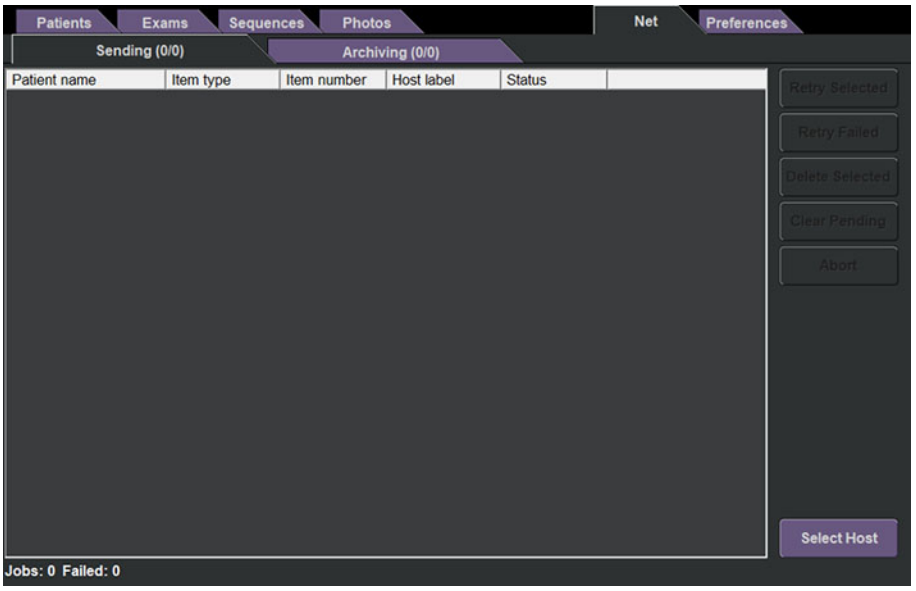
The Network queue contains the following columns:

- Patient Name.
- Item type (patient, exam, sequence or photo).
- Item number will show its number according to its type.

- Host Label. It will show the name of the destination host.
- Status. It will contain the transfer status (Pending, Active or Failed):
  - PENDING: waiting to be processed.
  - ACTIVE: the item is currently being transferred.
  - FAILED: when transfer of item failed to reach the host or one of the hosts. In this case the item remains in the queue. It is removed from the queue only by use of the **Delete Selected** button. It can also return in the queue with PENDING status by use of the **Retry Failed** Button.

NOTE
Successfully transferred items are removed from the Network Queue.

SENDING/ARCHIVING Queues Functions



- **Delete Selected**: Removes the selected item from the queue. This function is available only on items with PENDING or FAILED status.
- **Clear Pending**: Removes all PENDING items from the queue, after completion of the ACTIVE item transfer.
- **Retry Failed**: Returns all items with FAILED status to the active part of the queue; their status is changed to PENDING.
- **Retry Selected**: Allows to resend selected items with PENDING status (neither successfully pushed nor failed) in case of communication problem.
- **Abort**: Immediately aborts the current ACTIVE task.
- **Select Host**: Gives access to configuring different host(s).

7.4.3 Modality Performed Procedure Step (MPPS)

IGS System MPPS, together with the IGS System Worklist functionality, provides customers with a bi-directional interface between the Patient Monitoring/Scheduling/Reporting System and the IGS system. Demographic information is retrieved seamlessly from the Patient Monitoring/Scheduling/Reporting System to the IGS system previous to the examination, while X-Ray acquisition information is sent to the Patient Monitoring/Scheduling/Reporting System once the examination is completed.

How to send MPPS

MPPS will be sent automatically by the system.

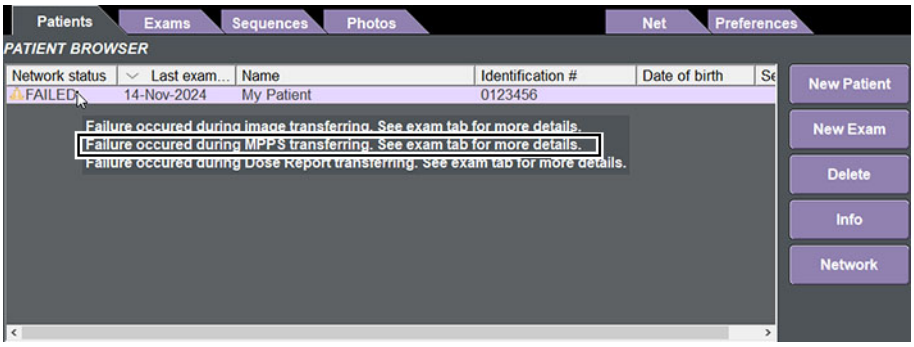
At **Start Exam**, the initial MPPS message is sent over the network. At **End Exam** or **Abort Exam**, the final MPPS message is sent over the network.

This message contains all patient demographic, dose related and exam related information.

How to check status of MPPS transfers

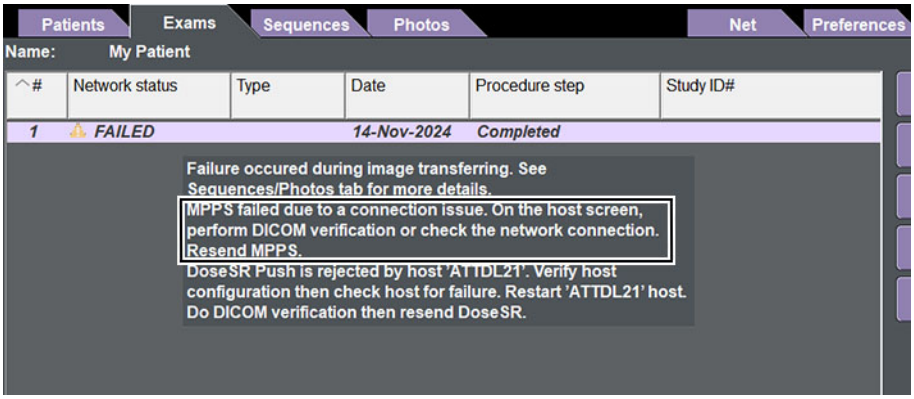
In the Patient and Exam Browser, the Network status will also consolidate the MPPS transfer status.

CASE 1: If the Network status at Patient Browser is FAILED, then place the mouse over the FAILED status. If the tool-tip displays `Failure occurred during MPPS transferring. See Exam tab for more details.`



Go to the EXAM Browser of that Patient.

If any Exam displays Network status as "FAILED", place the mouse over the FAILED status. Follow the tool-tip instructions to recover the error.

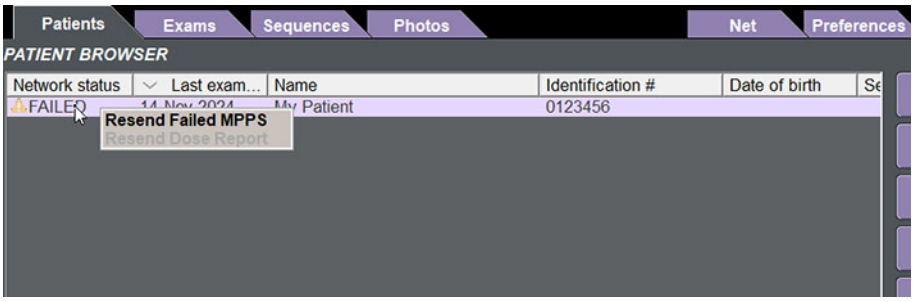


Steps to Resend MPPS:

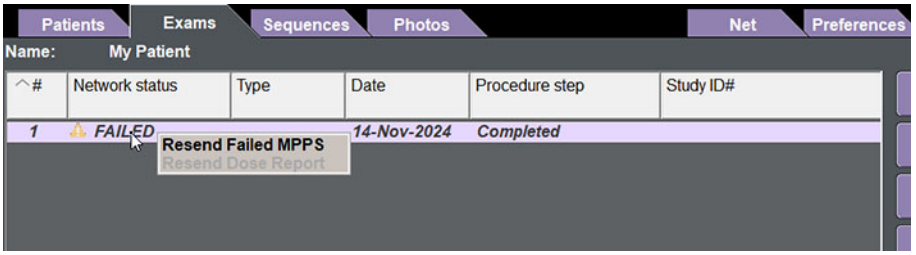
Only Failed MPPS can be resent.

For resending failed MPPS, right-click on the selected Patient or Exam and click `Resend Failed MPPS`.

Resend Failed MPPS from Patient Browser:

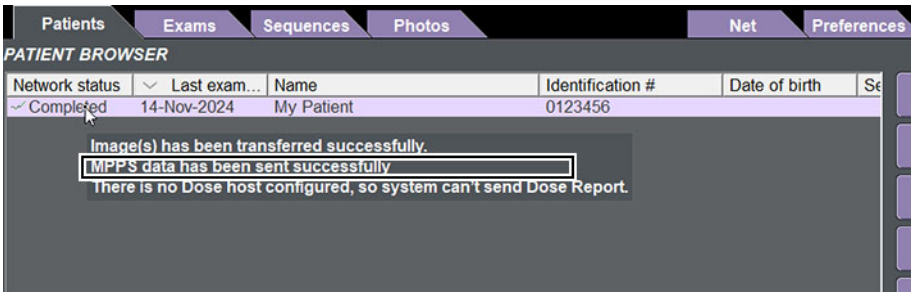


Resend Failed MPPS from Exam Browser:



CASE 2: If the Network status at Patient Browser is COMPLETED, then place the mouse over the COMPLETED status.

If the tool-tip indicates `MPPS data has been transferred successfully`, then it implies successful transfer of all MPPS for the selected patient.



How to integrate MPPS with Mac-Lab/CardioLab and Carddas system

In case the IGS system is connected to a Mac-Lab/CardioLab patient monitoring/scheduling/reporting or Carddas patient scheduling/reporting system, the benefit is the automatic and complete X-Ray documentation within the Patient Monitoring/Scheduling/Reporting System. X-Ray exam information is saved as part of the patient record and report of the Patient Monitoring/Scheduling/Reporting System.

NOTE
The exam started on IGS system must always be the exam that is active on the patient monitoring/scheduling/reporting system. Starting another exam on IGS system will lead to failing the export of the exam dose and data.

NOTE
Make sure that the exam is properly closed by pressing the **End Exam** or **Abort Exam** button on the IGS system browser screen. Pressing the **End Exam** or **Abort Exam** button will activate the automatic transfer of the exam data. If the IGS system is re-started without properly closing the exam, the exam data will not be automatically transferred.

Each time an exam is ended on IGS System, the X-Ray information of the recently performed exam is sent to the patient monitoring/scheduling/reporting system.

If the patient information is not populated on the Patient Monitoring/Scheduling/Reporting system, or the study is not activated on the Patient Monitoring/Scheduling/Reporting system, it will be impossible to retrieve on the IGS system the patient demographics via the Worklist. Therefore, a new patient and exam must be created manually on the IGS system.

At the end of this unscheduled exam, the X-Ray exam information will be integrated in the patient record of Mac-Lab/CardioLab and Carddas.

Known limitations with Mac-Lab/CardioLab system

The 'Cine Dose', 'Fluoro Dose', 'Total Dose' and 'Cine Frames' fields are not displayed in the Dose Report of Mac-Lab/CardioLab. The user may get these values from the information displayed along with the Live and Reference images of the IGS system. The user can also find these values in the DICOM Dose Structured Report document that will be available in the Dose Report Receiving station.

7.4.4 How to Network DICOM Dose Structured Report (Dose SR) to Dose SR Receiving stations

DICOM Dose Structured Report (abbreviation: Dose SR) is a standard medium defined by DICOM to convey dose information. It is a structured document [a tree of information] containing X-Ray and dose information.

10.8.4

Transfer of Dose SR is mandatory in the system.

Automatically Dose SR transfers happen to one or several hosts (workstation, PACS...) configured.

How to Network DICOM Dose Structured Reports

Optionally if storage commitment option is enabled, upon successful Dose SR transfer the system will request for archival of the Dose SR's sent to the selected Dose Archive Stations.

In the Browser, when **End Exam** or **Abort Exam** is clicked, Dose SR is automatically sent to all the configured Dose SR SCP(s), if any acquisition fluoro or record was taken during the study, irrespective of the acquisition being stored or pushed or deleted.

Dose SR has the dosage information of the exam performed, cumulated at every Performed Procedure Step level.

Run information (consolidated and not per frame) is provided for all fluoros, fluorostores and record acquisitions (i.e, for every irradiation event) acquired for a Performed Procedure Step in Dose SR object.

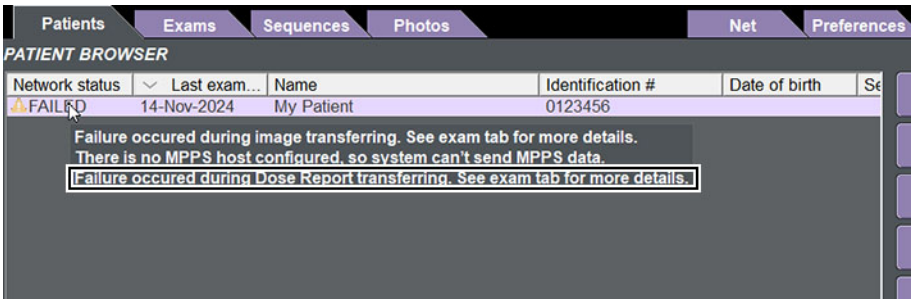
The reference to all images (record or fluoro acquisitions) that is acquired during the exam in-between **Start Exam** and **End Exam** is also included in the Dose SR object.

For the fluoro acquisitions, though the pixel data is not stored in system, Dose SR includes the available dose values and irradiation event UID s associated with the fluoro image.

How to check the status of Dose SR transfers

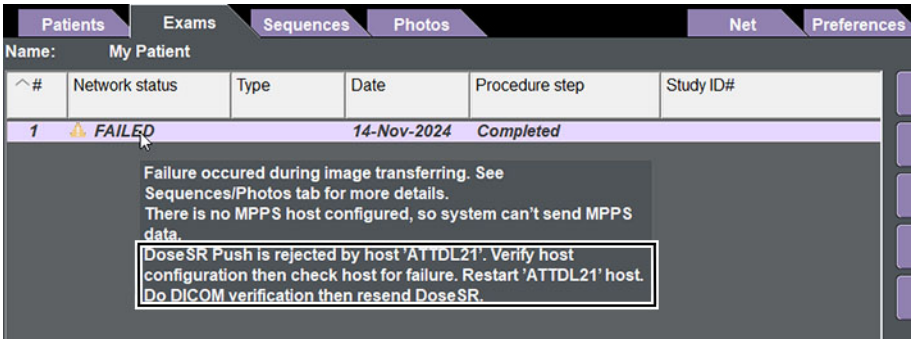
In the Patient and Exam Browser, the Network status will also consolidate the Dose SR transfer status.

CASE 1: If the Network status at Patient Browser is FAILED, then place the mouse over the FAILED status. If the tool-tip displays `Failure occurred during Dose Report transferring. See Exam tab for more details.`



Go to the EXAM Browser of that Patient.

If any Exam displays Network status as "FAILED", place the mouse over the FAILED status. Follow the tool-tip instructions to recover the error.

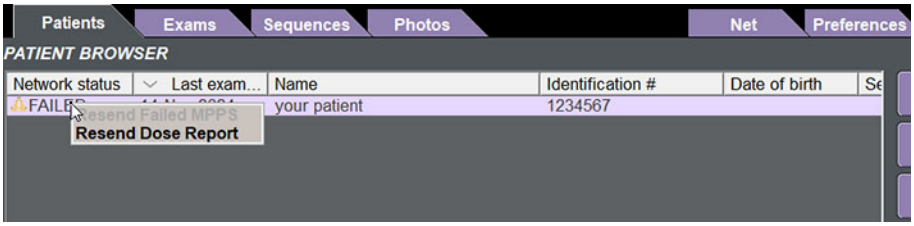


Steps to Resend Dose SR:

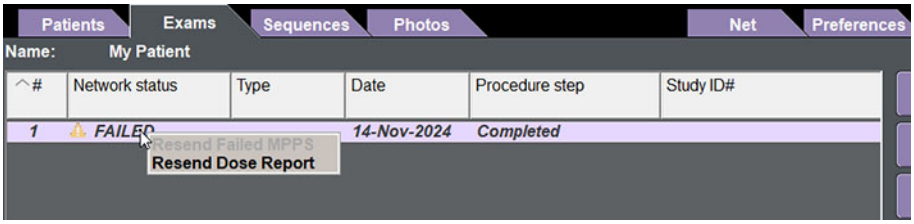
Successful and Failed Dose SR's can be resent.

For resending Dose SR's, right-click on the selected Patient or Exam and click `Resend Dose Report`.

Resend Dose Report from Patient Browser:

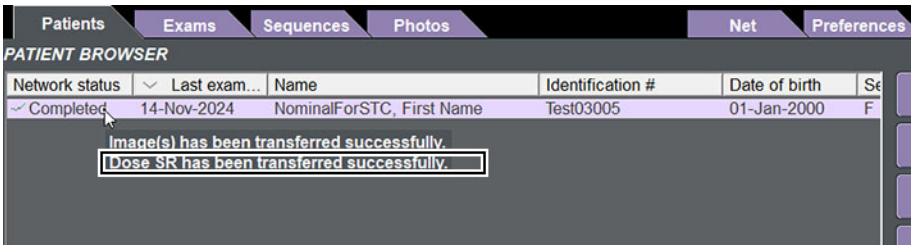


Resend Dose Report from Exam Browser:



CASE 2: If the Network status at Patient Browser is COMPLETED, then place the mouse over the COMPLETED status.

If the tool-tip indicates `Dose Report has been transferred successfully`, then it implies successful transfer of all Dose Reports for the selected patient.



How to integrate Dose SR with Advantage Workstation

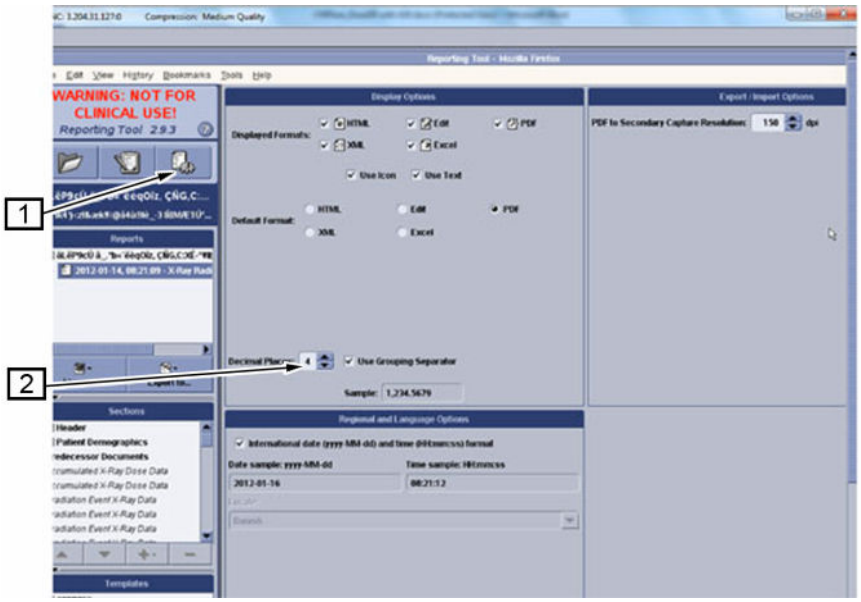
In case the IGS system is connected to an Advantage Workstation (AW), IGS System can be configured to transfer the Dose SR automatically to AW.

The configuration is performed as for any other Dose SR destination host, and requires administrative privileges. Contact your system administrator for configuration. On AW versions before AW4.7 Ext. 18 in which Reporting Tool is installed, the report can be viewed by using the Reporting Tool.

On AW4.7 Ext. 18 and later versions, the Dose SR can be converted to a DICOM Encapsulated PDF ('EDOC' type) and can be viewed in PDF format by double clicking on the DICOM encapsulated PDF series.

Known limitations with AW Reporting Tool display

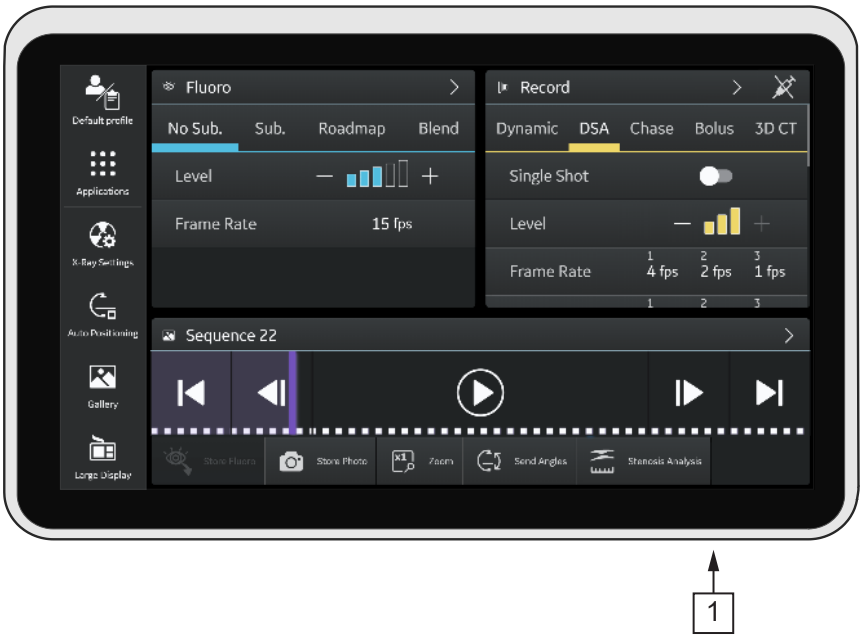
1. It could be possible that for DAP value's $<10^{-3}$ or $>10^{7}$, values displayed in the report are inconsistent with value displayed with AW Reporting Tool 2.8 and before. Reporting Tool 2.9 to be installed to overcome the problem.
2. In the Reporting Tool, click on **Options** button **[1]** in Display options window, set Decimal places to "4" **[2]**.



3. Restart AW.

8 Touch Panel

8.1 Introduction



The Touch Panel offers an easy and direct access from table side to most commonly used functionalities required during your intervention.

NOTE
When the Touch Panel is draped and used with gloves, follow these recommendations to ensure smooth operation:

- Keep your fingers humid, yet not too wet (shake drops off your hands and fingers).
- Adjust the drape around the Touch Panel with an elastic band or hold it tightly.
- Wipe off the Touch Panel with a cloth if there's a large quantity of liquid on it.
- If unwanted actions are detected, wipe off the Touch Panel with a cloth.
- Rinse fingers before using the Touch Panel if blood or contrast media remains on the gloves.

NOTE
In case the Touch Panel hangs or does not respond properly, the ON/OFF button **[1]** can be used to switch the Touch Panel off then back on without having to restart the entire system.

8.2 Touch Panel locations

The system may have up to 2 Touch Panels installed.

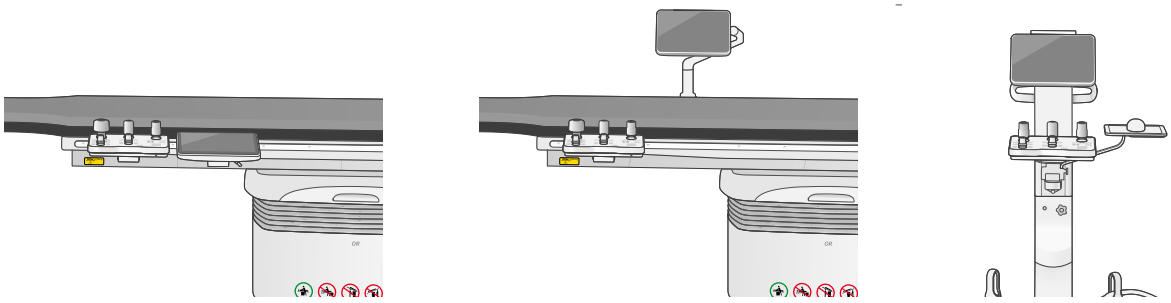
The location of the one at table side can be adjusted. To position it at the table side, pull the handle located underneath the Touch Panel, position it on over the table accessories rail and release the handle. 8.1.2

If it is installed on an articulated arm on the table rail, the arm can be moved. Refer to the 12.4.6 Touch Panel Arm (Option) on page 436.

NOTE
Before using the Touch Panel, make sure it is well secured on the rail.

A Touch Panel is permanently installed on the IGS Control Center.

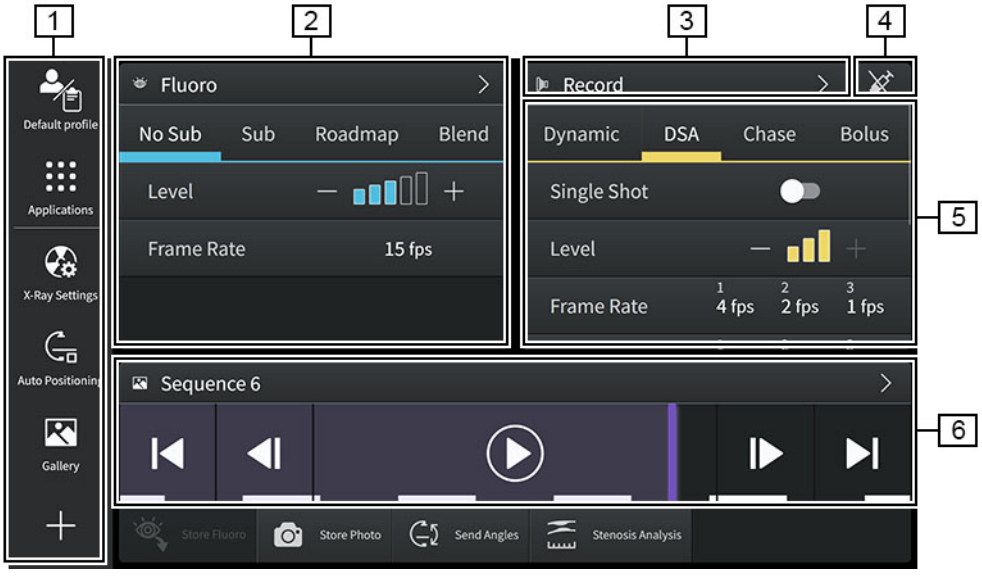
With Maquet tables, the Touch Panel is only located on the cart.



8.3 Touch Panel Screens

Home Screen

The content of the home screen is customized for each profile. Before editing the home page, check that you selected the correct profile. Refer to Profile Management on page 213.



8.2.1, 8.2.3, 8.2.4

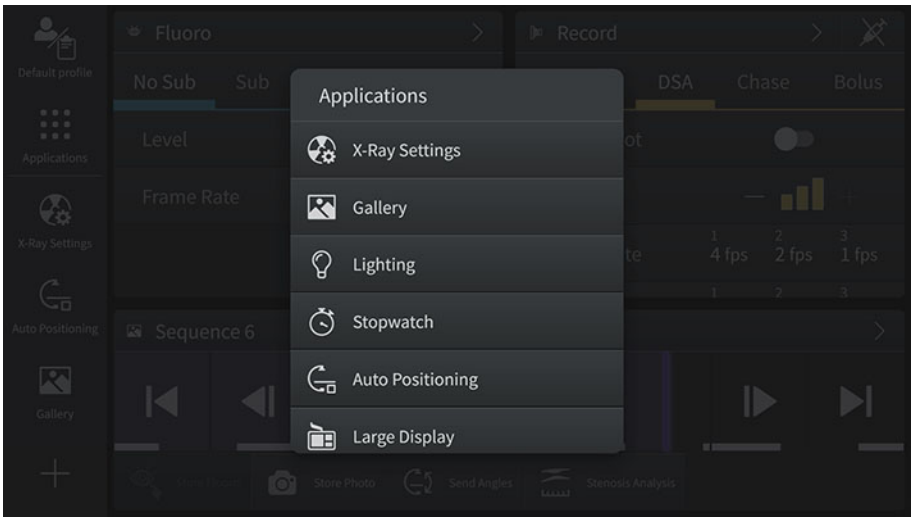
The home screen contains application icons -shortcuts **[1]** and the fluoro, record and review widgets **[2]** in the main screen area. Shortcuts open the corresponding application, whereas widgets provide live feedback and controls **[5]**. Tapping the header **[3]** of a widget opens the corresponding application.

The navigation bar **[6]** allow to slide anywhere in the bar area to navigate to the desired frame.

The syringe button **[4]** in the record widget header directly activates or deactivates the auto-injection. A long press on it opens its delay settings.

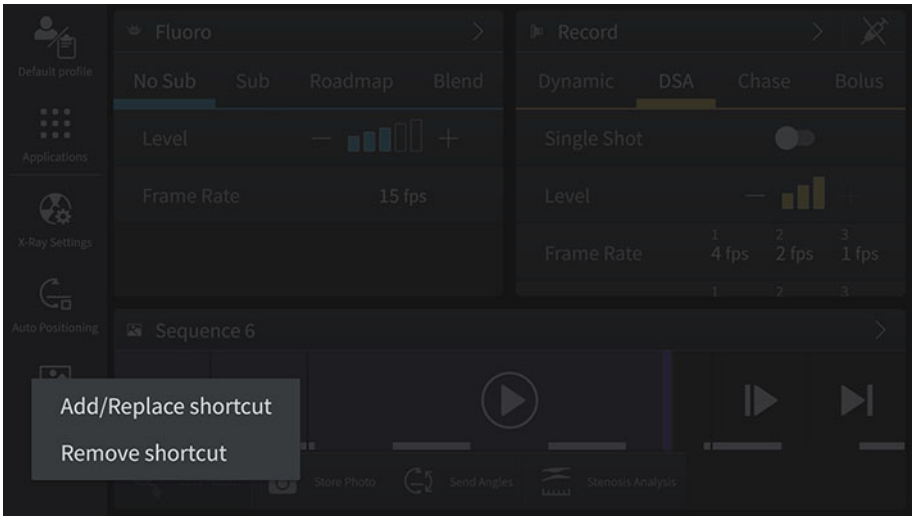
Shortcuts:

- The top two icons cannot be edited:
  - The **user/exam** icon opens the ***Exam management*** page. The name below the icon is that of the selected profile.
  - The **application** icon opens the list of all the available applications.
- The 4 other shortcuts are customizable.
  - A cross means the shortcut is not assigned. A tap opens a dialog box to choose an application for the slot.

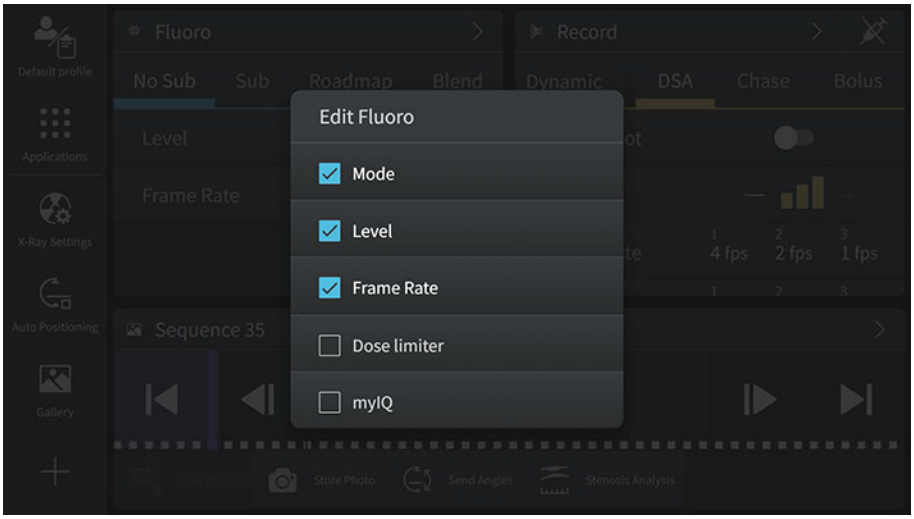


NOTE
The actual screen contents depends on the system configuration and options.

- When the shortcut is assigned, a long press opens a menu to either change the application or remove the shortcut.



- **Widgets** (Fluoro, Record and Sequence-review).
  For each widget
  - A tap on the header navigates to the corresponding application, where all the controls are available (X-ray settings for fluoro and record, review sequence for the review widget).
  - A tap on a control area triggers the action or opens the corresponding menu.
  - If controls exceed the visible area of the widget, the content can be scrolled (vertically for fluoro and record, horizontally for review). A scrollbar is displayed when the content can be scrolled.
  - A long press on a widget opens the list of controls that can be added for this widget. Check / uncheck the controls then exit and apply by tapping outside of the list.



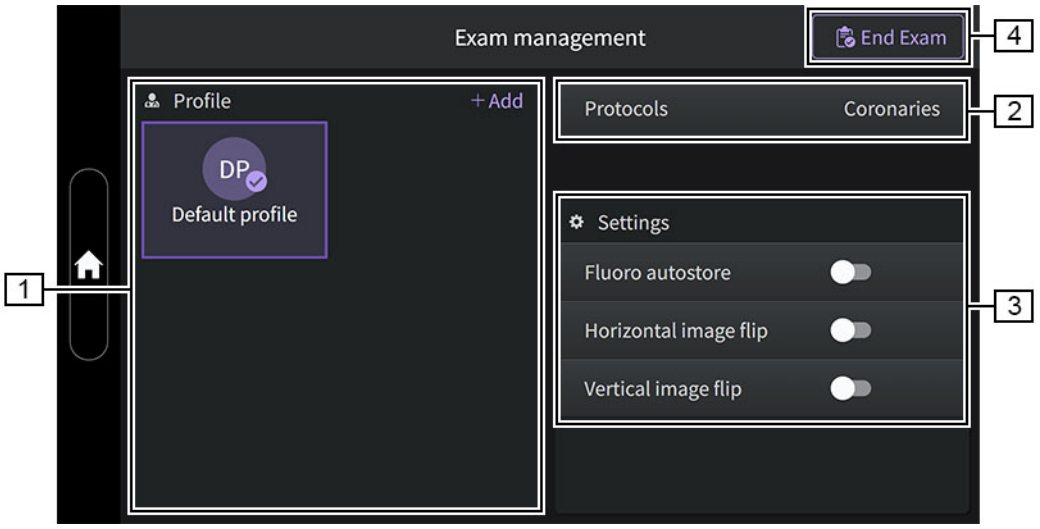
NOTE
The navigation bar of the sequence widget and the auto-injection toggle in the record header are not customizable.

Navigation to home page

From every application, going back to the home screen is possible by tapping the **home** button

on the left bar.

Exam management



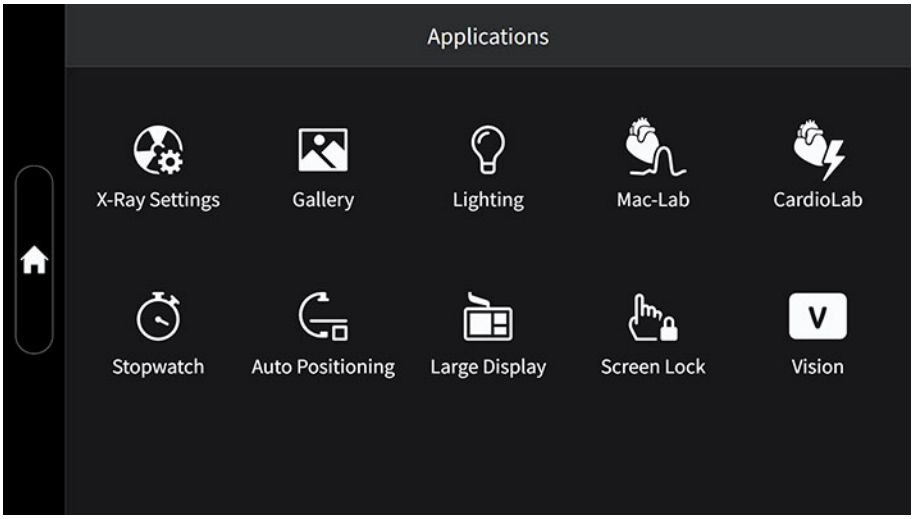
- The profile area **[1]**. Refer to Profile Management on page 213.
- The selected protocol **[2]**. A tap opens the list of protocols included in the current profile and allows to change the selected protocol. A long press opens the profile edition workflow to add/remove any protocol of the current profile.

> **NOTE**
> To add a protocol from the entire list available on the system, edit the current profile and customize the list of protocols in the Step 3 (refer to Profile Management on page 213)

- The setting area **[3]** with the following controls:
  - The Fluoro autostore, refer to 10.3.5 Fluorostore on page 237
  - The horizontal and vertical flip controls, refer to 10.2.4 Image Flip on page 231.
- The ***End Exam*** button **[4]**. A confirmation is required to close the current exam.

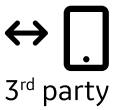
Applications list

This panel lists all the applications available on the system. Depending on configuration and options, the content may vary. A tap on an icon opens the corresponding application.



Exhaustive list of applications:

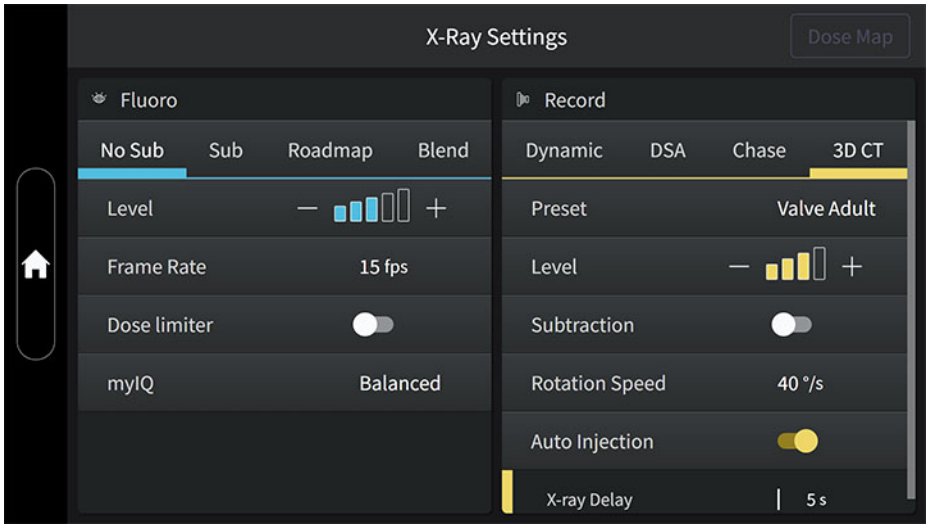
Symbol	Application name	Description
	X-ray settings 8.2.3	Access to the acquisition parameters (fluoro and record), and dose map (option). Refer to X-Ray - Settings on page 205.
	Gallery 8.2.4	Access to the gallery of sequences and photos. The gallery can be used to access post processing functions. Refer to: 10.7 How to review a Sequence/ Photo on page 293 and 10.7.6 Gallery / In-room Browser on page 304.
	Lighting	Access to the lighting and themes controls. Refer to Lighting on page 207.
	Mac-Lab (option)	Access to the most common functions of Mac Lab. Refer to Mac-Lab on page 207.
	Cardio Lab (option)	Access to the most common functions of Cardio Lab. Refer to Cardio-Lab on page 209.
	Table Head Extensions (only with Magnus Maquet OR Table)	Access to declare the headrest currently installed from the list of compatible headrests available on Magnus Maquet OR Table in combination with the Allia IGS system. Refer to Table Head Extensions (with Magnus Maquet OR Table) on page 210.
	Stopwatch	Access to display and control the Stopwatch. Refer to 10.9.7 Stopwatch on page 326.
	AutoPositioning 8.2.1	Access to select, store and edit your predefined system positions. Configure the motions and display between Anatomic and Machine. Also includes access to the Cardiopulmonary Resuscitation (CPR) position. Refer to 12.6 Auto Positioning on page 442 and to 3.6.9 Cardiopulmonary Resuscitation (CPR) on page 61.
	Large Display (option) 8.2.5	Access to select and manage the large display layouts. Refer to 15.4 How to control the Large Display Monitor on page 466

Symbol	Application name	Description
	Screen lock	Protect the current Touch Panel from unintended touch and interactions. Refer to Touch Panel Screen Lock on page 211.
	Vision (option)	Access to the AW Vision application(s). **Refer to the related User Manual(s).**
	Third party (option) The icon will differ depending on 3rd party	Access to the Third party application(s), for example Avvigo. **Refer to the related User Manual(s).**

X-Ray - Settings

This application allows to set the fluoro, record acquisition parameters and to access dose map.

Below is the list of the parameters. Refer to the Acquisition and Review on page 219 to get more information about the details of each acquisition mode.



Full list of **Fluoro** parameters on the page:

Item	Description
Acquisition Mode (No Sub / Sub / Roadmap / Blend)	Select the fluoro acquisition mode.
Level	Adjust the image quality/dose compromise.
Adjust the image quality level	The bar graph represents the selected level within the available levels.
Frame Rate	Select among the available Fluoro frame rates.
Landscape	Select the level of landscape for Subtracted Fluoro modes.
Vessels	Select the percentage of vessel visibility in Blended Roadmap.
Simultaneous display (option)	If the system has an optional additional live display, allow for the display of a subtracted fluoro image simultaneously with the unsub fluoro image.

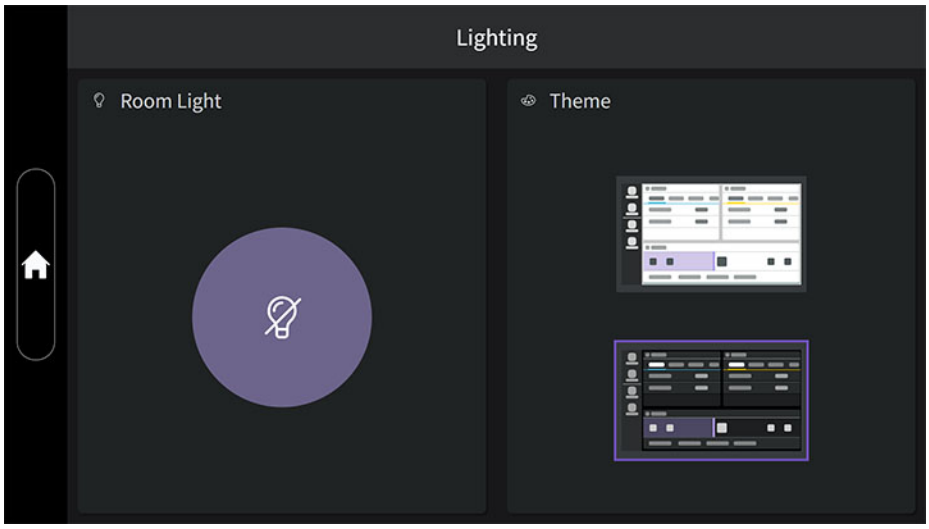
Item	Description
Dose limiter	Toggle the Dose Limiter on and off.
AutoPixel Shift	Toggle and refresh the autopixel shift for blend acquisitions.
myIQ (cardiac protocols only)	Select the image look preset of NoSub Fluoro.

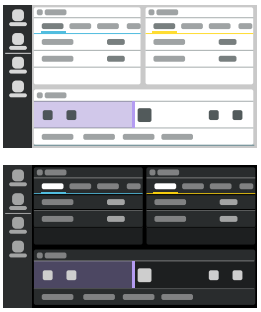
Full list of **Record** parameters on the page:

Item	Description
Acquisition Mode (Dynamic / DSA / Chase / Bolus / 3D CT / 3DStent)	Select the record acquisition mode.
Preset	Select a preset for 3D spin image acquisitions.
Single Shot	Toggle single shot acquisition for DSA.
Set Start Position / Set End Position	Memorize the start / end positions for Bolus Chase, or reset them.
Level	Adjust the image quality/dose compromise.
Adjust the image quality level	The bar graph represents the selected level within the available levels.
Innova spin T4	Select among the list of predefined spin trajectories for Dynamic and Chase.
Frame Rate/Duration	Set Record acquisition frame rate and duration.
StentViz	Toggle the StentViz processing for the next acquisition for Dynamic.
StentVesselViz	Toggle the StentVesselViz processing for the next acquisition for Dynamic.
Subtraction	Toggle between subtracted and Non subtracted acquisition.
Rotation Speed	Depending on system configuration, allows to select the gantry rotation speed for 3D CT and 3DStent.
Frame rate at rest	Select the frame rate when the table doesn't move for Bolus Chase.
Step length	The displacement of the table between two steps for Bolus Chase is 5 cm.
Auto Injection	Toggle the Auto Injection function on and off
X-Ray Delay	Select the delay between Injection and X-Ray.
Injection Delay	Select the delay between X-Ray and injection.
myIQ (cardiac protocols only)	Select the image look preset for Dynamic.

The Dose Map toggle in the header displays or hides the local dose map on the reference monitor. For more information about Dose map, see 11.5 Dose Map (Option for system with Omega or Innova[IQ] Table) on page 378.

Lighting



Symbol	Item	Description
	Room light	Switch on or off the exam room light. Depending on the system installation, this function may not be active, if you would like to modify this setting, contact your GE HealthCare representative.
	Themes	Two themes are provided to adapt the Touch Panel screen brightness to the lighting conditions. This preference is saved for each profile. The dark theme is more comfortable in dark environments. The Light theme offers a better contrast in bright environments and reduces glare.

(For Allia IGS systems) , the mast light can be adjusted on the gantry touch screen. Refer to the 12.1.1.2 AGV Lighting on page 394.

Mac-Lab

Depending on the system configuration, if a ***Mac-Lab*** system is connected to the IGS system, the most common physio functions such as probe selection, zero setting, scale selection, measurements, gain selection... are directly accessible.

The ***Mac-Lab*** screen cursor control is located on the joypad selection. The **click** button triggers and action in the context of the ***Mac-Lab*** interface.

Refer to the ***Mac-Lab*** specific User Manual for detailed description of all these functions.

Label	Description
Study > Emergency	Begins a new study, bypassing the patient demographic input. The patient information is set as follows: • Last Name: Timestamp • First Name: No Name • MRN: Timestamp
Study > Close	Closes the current Mac-Lab study in progress. • Yes/No confirmation on the Touch Panel. • No confirmation from the Mac-Lab application.
Labels	Labels a selected blood pressure channel ART, PA, VEN, PV, LA, RA, AO, RV, VC, SP, LV, or PCW.
12 Lead	Prints a Real-Time 12 lead. Also adds 12-Lead event to the log.
Scale	Scales all pressures to 25, 50, 100, or 200 mmHg as selected.
P1	Selects blood pressure channel 1 in the Real-Time window.
P2	Selects blood pressure channel 2 in the Real-Time window.
Measure	Measures the current active pressure. The pressure measurement is displayed in the Review and Log windows.
Measure All	Measures all displayed pressures. The pressure measurements are displayed in the Review and Log windows.
Zero	Sets the selected pressure to zero for calibration.
Zero All	Sets all displayed pressures to zero for calibration.
Sweep Up	Increases the scroll/sweep speed in the active window to the next scroll/sweep speed value up in the list.
Sweep Down	Decreases the scroll/sweep speed in the active window to the next scroll/sweep speed value down in the list.
Update	Saves about 10 seconds of signal data in the Review window (the actual time of data saved depends on the number of channels displayed). A corresponding entry appears in the Log (green time-stamp).
Switch Video	Toggles the video signal sent to the monitor in the procedure room.
Stopwatch	• Open: Opens a new stopwatch on the Real-Time window. • Close: Closes the stopwatch opened above. • Reset: Resets the time on the stopwatch to 0:00.

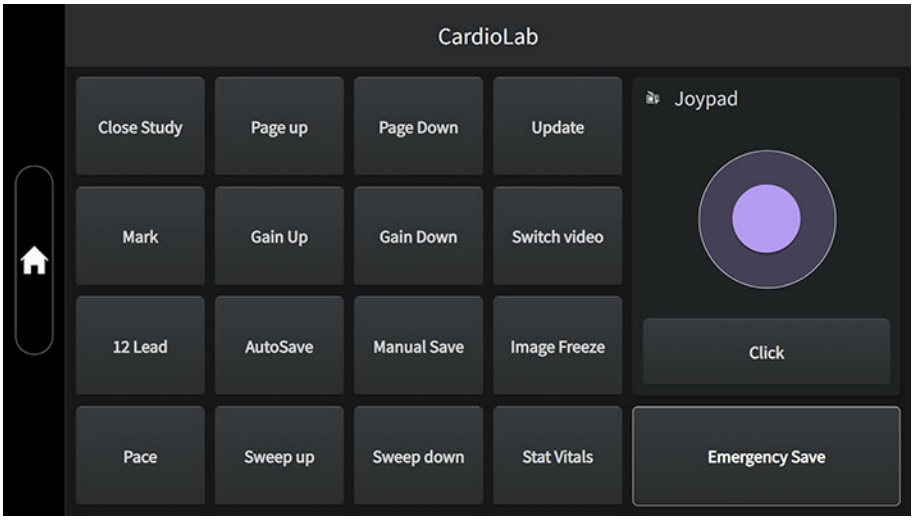
Label	Description
Start/Stop Stopwatch	Starts or stops the stopwatch.
Emergency Save	Immediately starts saving signals in the Real-Time window to the optical disk. Also saves as much data as possible from memory.
Stat Vitals	Performs a Stat Vitals measurement. The current HR, SPO_2, RR, temperature, Inspired CO_2, and Expired CO_2 are recorded as-is from the Status area into the Log window.

CardioLab

Depending on the system configuration, if a ***CardioLab*** system is connected to the IGS system, the most common physio functions such as probe selection, zero setting, scale selection, measurements, gain selection... are directly accessible.

The ***CardioLab*** screen cursor control is located on the joypad selection. The **click** button triggers and action in the context of the CardioLab interface.

Refer to the ***CardioLab*** specific User Manual for detailed description of all these functions.



Label	Description
Close Study	Closes the current study in progress. • Yes/No confirmation on the Touch Panel. • No confirmation from the CardioLab application.
Mark	Creates a new note at the current time with the Mark text in the Event Log.
12 Lead	Prints a Real-Time 12 lead. Also adds 12-Lead event to the log.
Pace	Switches the pacing settings to the highlighted channel poles.
Page Up	Changes the display of the Real-Time window up one page.
Page Down	Changes the display of the Real-Time window down one page.
Gain Up	Increases the gain for the selected ECG, intracardiac, or high-level input channels.
Gain down	Decreases the gain for the selected ECG, intracardiac, or high-level input channels.
Auto Save	Enables/Disables the automatic saving option.
Manual Save	Starts/Stops saving the signals in the Real-Time window.
Sweep Up	Increments the scroll/sweep speed in the active window to the next scroll/sweep speed value up in the list.

Label	Description
Sweep Down	Decreases the scroll/sweep speed in the active window to the next scroll/sweep speed value down in the list.
Update	Saves about 10 seconds of signal data in the Review window (the actual time of data saved depends on the number of channels displayed). A corresponding entry appears in the Log (green time-stamp).
Switch Video	Toggles the video signal sent to the monitor in the procedure room.
Image Freeze	Freezes an image in the CardioImage window.
Emergency Save	Immediately starts saving signals in the Real-Time window to the optical disk. Also saves as much data as possible from memory.
Stat Vitals	Performs a Stat Vitals measurement. The current HR, SPO_2, RR, temperature, Inspired CO_2, and Expired CO_2 are recorded as-is from the Status area into the Log window.

Third-Party

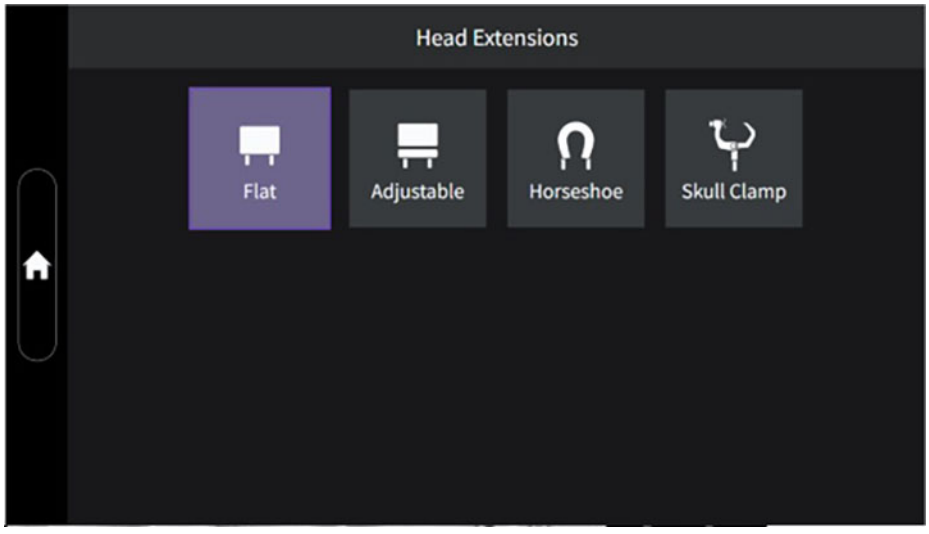
Depending on the system integration, the most common functions of a Third-party may be directly accessible on Touch Panel.

Refer to the Third-Party specific User Manual for detailed description.

Table Head Extensions (with Magnus Maquet OR Table)

This application displays the compatible headrests available with the Allia IGS system in combination with Magnus Maquet OR Table. You must perform a manual declaration of the accessory because the system does not automatically detect which one is installed. This step is important because the system optimizes the anti-collision software model based on the selected accessory (Refer to 3.6.6 System Collision on page 59.)

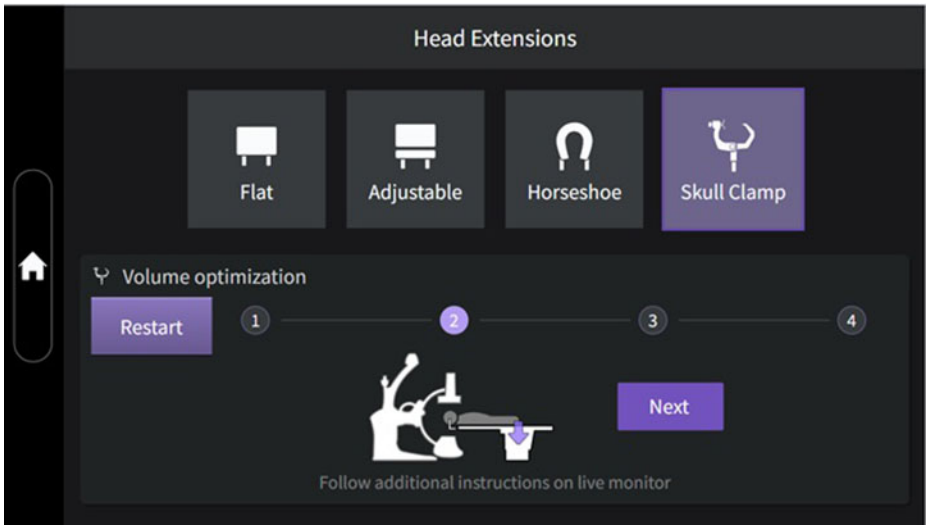
Figure 8-1 Head extensions application for Magnus Maquet



Element	Description
	Declare the Flat head rest (1002.82A0)

Element	Description
	Declare the bendable/adjustable Head rest (1002.83A0)
	Declare the Horseshoe head rest (1002.03A0)
	Declare the Skull clamp (1005.48B0 and 1005.49B0) When this accessory is selected, an additional step is required to optimize the anti-collision software model. (Refer to Skull Clamp collision avoidance with Magnus Maquet OR Table on page 437.

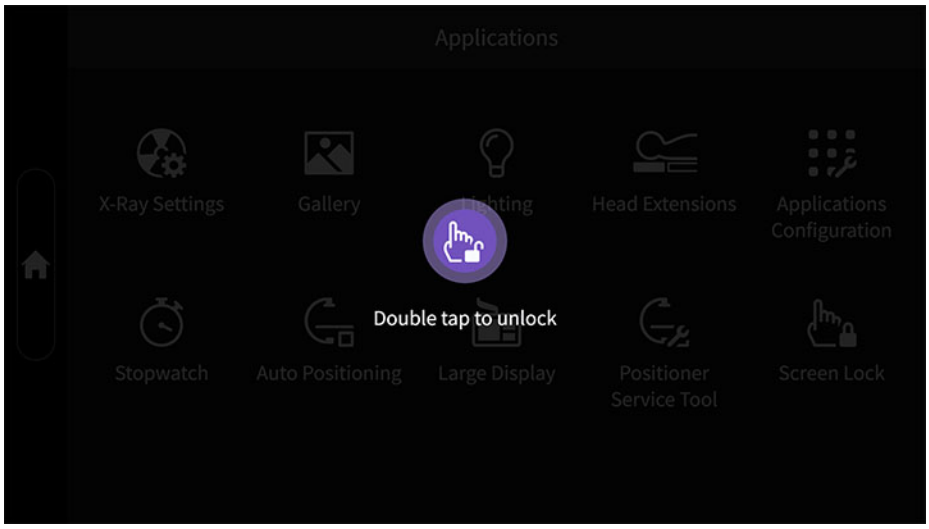
Figure 8-2 With the Skull Clamp selected, the volume optimization workflow is displayed



Element	Description
Restart	Restart the optimization of the anti-collision software model.
Next	Validate the current step of the optimization and go on the next step.

Touch Panel Screen Lock

A tap on the Screen Lock icon in the application list activates this application and protects the Touch Panel screen from unintended touch and interactions. Only the central button reacts to double taps and exits this screen.



Use this application:

- To freely move the Touch Panel.
- To clean the surface of the screen.
- To remove liquids that might interact with the Touch Panel.

9 Profile Management

9.1 Overview

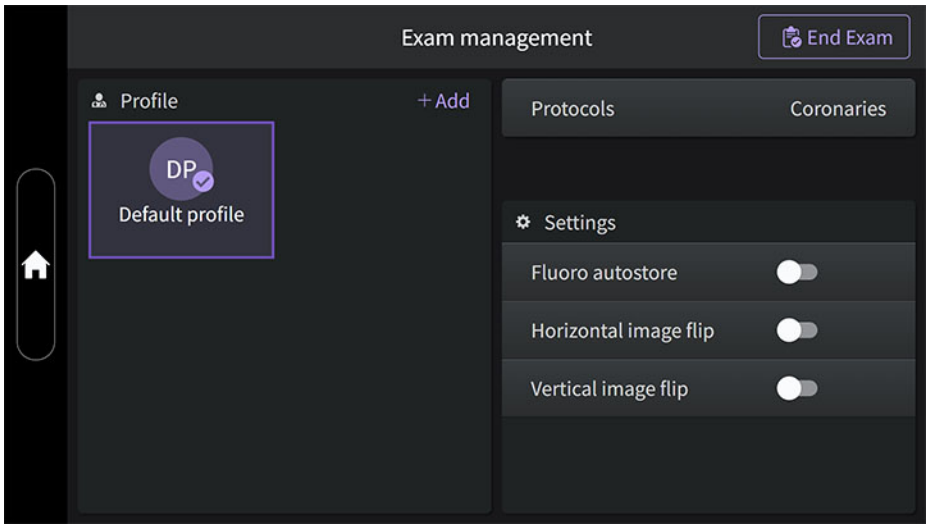
The system environment can be customized for each profile. When selected, the profile sets the following parameters:

- The customized list of protocols, refer to List of Protocols on page 220,
- The customized list of LDM layouts, refer to 15.4 How to control the Large Display Monitor on page 466,
- The list of Auto Positioning presets, refer to 12.6 Auto Positioning on page 442,
- The Touch Panel visual theme, refer to Lighting on page 207,
- The customized home page, refer to Home Screen on page 200.

Profiles can be managed through the Profile management interface through the Touch Panel in the **Exam management** page.

9.2 How to create a profile

Select **+Add** in **Exam management** page:



Step 1: Select the factory template or the existing profile to be duplicated (see Figure below).