Emailing Diagnostic Imaging to IROC RI via Dicommunicator

Description

This article will lead you step-by-step through the process of using Dicommunicator to email diagnostic imaging to IROC Rhode Island in Lincoln, RI. Before you can email this diagnostic imaging, you will need to either pull (query/retrieve) or push the DICOM files from the PACS to your local system. (Refer to the ***Retrieving Images To Local System With Dicommunicator*** document for more information). Once this has been done, follow the instructions below to email the imaging to IROC RI.

For additional information please contact:

IROC Rhode Island QA Center
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640 George Washington Highway
Lincoln, RI 02865-4207
Phone (401) 753-7600
Fax: (401) 753-7601
Email: Dicommunicator@QARC.org

EDITING PROTOCOL LIST

10   Before emailing imaging to IROC RI, you will need to enter the protocols you will be working with into Dicommunicator.

20   Double-click the Dicommunicator icon to launch the program and log in.

30   Select the [Manage Coop Group Data] button from the Main Menu. The "Cooperative Group Study List" page will open. In this section, the user will be able to track what studies they have pulled or pushed to their local machine and the status of each (e.g. if they have been emailed to IROC RI).
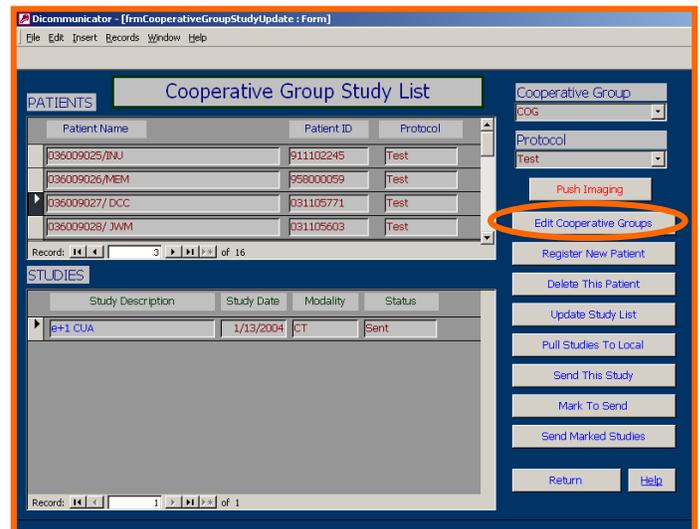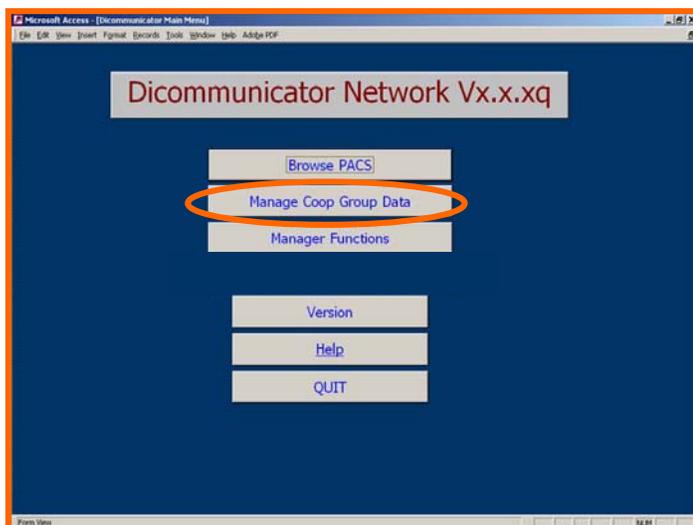
40   Choose the [Edit Cooperative Groups] button and a "Cooperative Groups" form will open with some pre-populated values.

50   Enter information for your Cooperative Group if it is different from the default value (you can use the [Add New] button to enter multiple Cooperative Groups). Select [Edit Protocol List] to open a "Cooperative Group Protocols Page". You will add the appropriate protocols for the listed Cooperative Group here. Select [Add New], enter values for 'Cooperative Group' (e.g. COG) and the appropriate 'Protocol' or Study (e.g. A3973) in the corresponding field. If you are working with multiple Cooperative Groups, you will need to navigate to each one on the "Cooperative Groups" form and choose [Edit Protocol List] from there.

Note: Dicommunicator will use the information you enter here in place of Patient Identifiers as part of the anonymization process.

60   Select [Return] three times to get back to the Main Menu and then [QUIT] out of the program completely to refresh these values. Double-click the Dicommunicator icon and log back in.

VIEWING AND EMAILING IMAGES

70   Select the [Browse PACS] button from the Main Menu. The Dicommunicator Browser window will open.

80   Navigate to the images that you would like to email by using the 'Query Host:' drop-down menu (e.g. select [LOCAL] to locate images that have been pulled or pushed to the local machine).

90   Select the study that you would like to email using the record selectors on the left.

100   Choose [View Images]. The Dicommunicator Viewer will open.

110   Using the navigation tools in the lower right corner of this viewer, you will be able to scroll through the images as well as view them in different formats to verify that these are the images you would like to send.

120   Choose the [Select] button from the 'Tools' section and right-click the image to select all images (they will outline in green) or left-click the image to select one image at a time (they will outline in red).

Note: The 'Tools' section also offers utilities including Crop, Window/Level, Flip/Rotate, Measure and Mask.

130   Once you have selected the images you would like to email, select the [Email Images] button located in the upper-right hand corner of the viewer page. A 'Cooperative Group / Study Mapping' form will open.
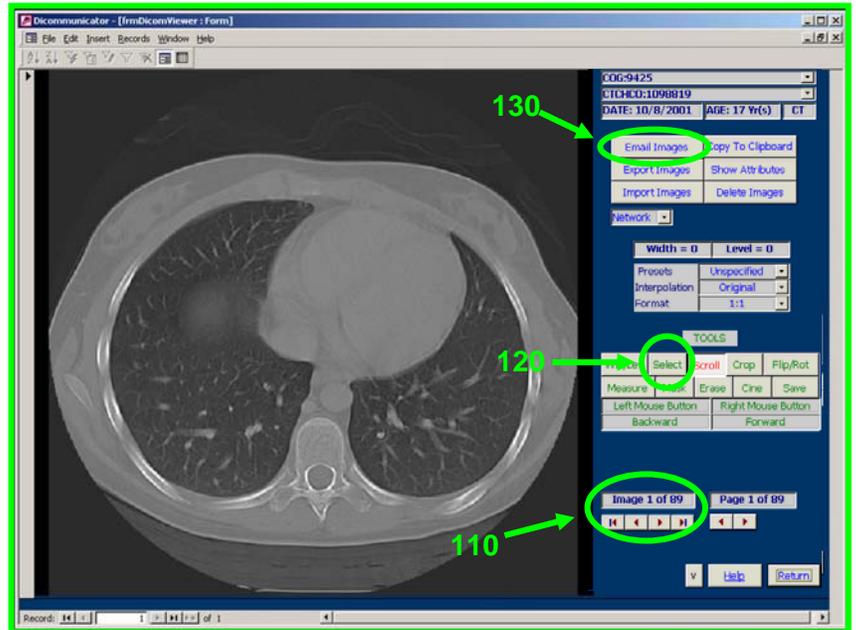
140   Select the appropriate Cooperative Group and Protocol from the drop-down menus. (These are the values that you have pre-set in the [Manage Coop Group Data] section of Dicommunicator.) Select [Verify Mapping].
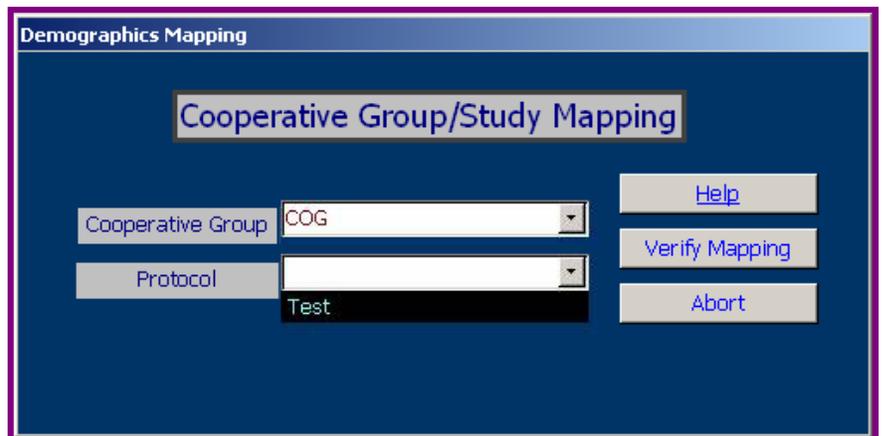
**150**   If this is the first time you have emailed images for this patient, Dicommunicator will prompt you to register the patient. Select [Yes] to register the patient. If you have already registered this patient, the 'Email Images' form will open – jump to Step 180.
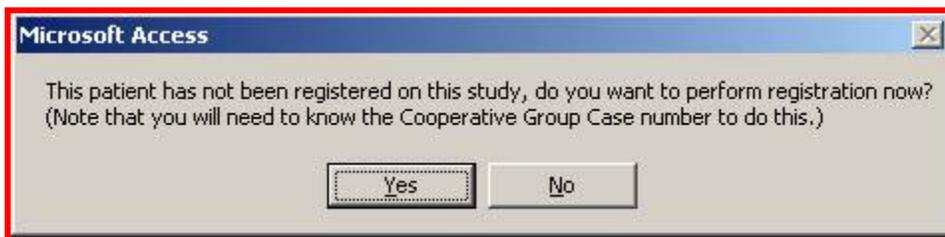
160   Dicommunicator will prompt you to enter the Case Number (e.g. COG Number). Type this number in the given field and then select [OK].

170   You will be asked to verify that the number you have entered is the correct Case Number. Select [Yes] if it is correct or select [No] if it is not and repeat steps 130–160.

180   An 'Email Images' form will open with some default values pre-populated.
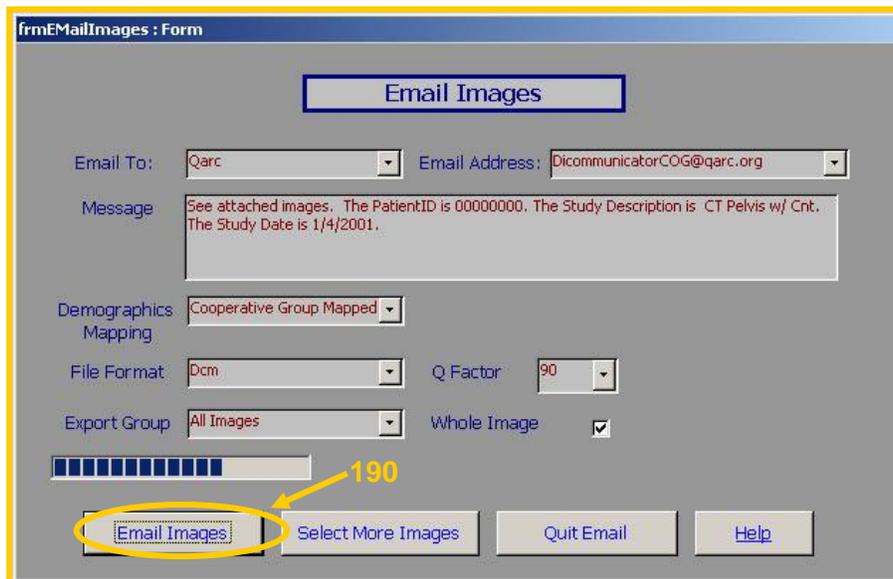
An Explanation of the Email Images Form

The default '**Email To**:' and '**Email Address**:' fields are set to send the images to 'IROC RI' (e.g. 'DicommunicatorCOG@qarc.org').

The '**Message'** box will populate with the Patient ID, Study Description and Study Date when you choose [Email Images].

'**Demographics Mapping'** is set to 'Cooperative Group Mapped' which indicates that the patient identifiers will be scrubbed off of the images and replaced with information that is useful to IROC RI (i.e. Case Number). You may also set this value to 'Unmodified' which will leave the images unchanged, or to 'User Defined'. If you choose 'User Defined', a 'Filename Prefix' field will appear. The value you enter in this field will replace the patient identifiers and will be the name of the file stored to disk.

The '**File Format'** field is set to 'Dcm' which indicates that you are sending DICOM files. Other options in this drop-down include: JPEG and Bitmap files.

The '**Export Group'** is defaulted to send 'All Images'. However you can select a certain number of images in the viewer (they will be highlighted in red) and choose 'Selected Images' to send only a few specific images.

The default for '**Q factor'** is 90 and should always be set at 90 or above. This value is the Quality factor and means that the images will be compressed at a quality factor of 90 making them "clinically lossless".

By checking the '**Whole Image'** checkbox, you will ensure that the entire image will be sent, not just the portion of the image viewable in the DicomViewer.

190   Once the values on the 'Email Images' form are set appropriately, select the [Email Images] button. You will see a blue progress bar indicating that the images are being emailed. When the process is complete, Dicommunicator will give you a message indicating that the images have been sent. Choose [OK].

200   You should now send an email to DataSubmission@QARC.org that the images have been submitted via email using Dicommunicator.