

Emailing Diagnostic Imaging to QARC via Dicomunicator

Version Date: 2/05/2007

Description

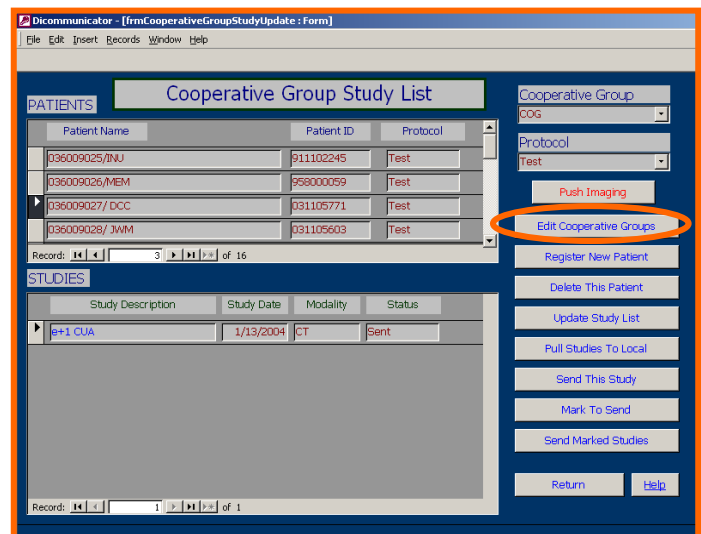
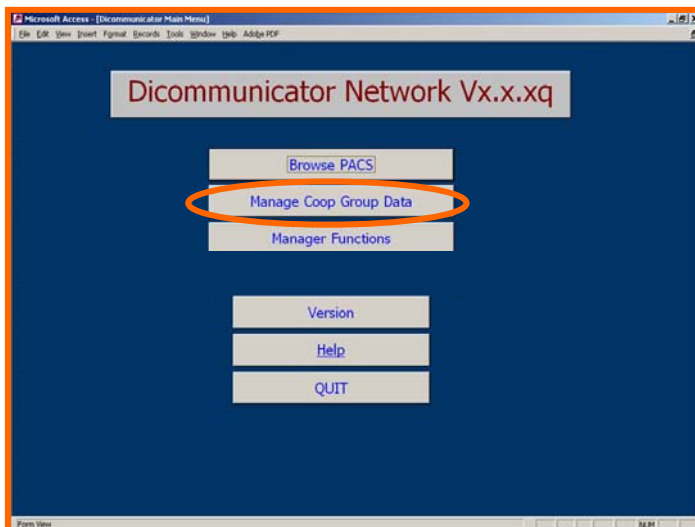
This article will lead you step-by-step through the process of using Dicomunicator to email diagnostic imaging to the Quality Assurance Review Center (QARC) in Providence, RI. Before you can email this diagnostic imaging, you will need to either pull (query/retrieve) or push the DICOM files from the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

For additional information please contact:

Quality Assurance Review Center
 Phone # (401) 753-7600 Fax # (401) 753-7601
 Email: Dicomunicator@QARC.org

EDITING PROTOCOL LIST

- 10 Before emailing imaging to the Quality Assurance Review Center (QARC), you will need to enter the protocols you will be working with into Dicomunicator.
- 20 Double-click the Dicomunicator 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 QARC.)



- 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.*

The screenshot shows the 'Cooperative Groups' form with various input fields for Group, Email Name, Email Address, FTPAddress, FTP Login, FTP Password, Preferred Conduit, Compression Quality, and Encryption. The 'Edit Protocol List' button is circled in blue.

The screenshot shows the 'Cooperative Group Protocols' form with input fields for Cooperative Group (COG) and Protocol (AEW01). The 'Add New' button is circled in blue.

- 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.

The screenshot shows the main menu with buttons for 'Browse PACS', 'Manage Coop Group Data', 'Manager Functions', 'Version', 'Help', and 'QUIT'. The 'Browse PACS' button is circled in green.

The screenshot shows the 'DICOMMUNICATOR BROWSER' window with a table of study records. The 'Query Host' dropdown is circled in yellow and labeled '80'. The 'View Images' button is circled in yellow and labeled '100'. A record selector is circled in yellow and labeled '90'.

Patient Name	Study Date	Study Description	Modality
COG-09803	2/20/2002	PR3 Brain w/iso Contrast	PR3
COG-09803	4/2/2002	CT Brain w/o Cont	CT
COG-09803	3/29/2001	CT Neck w/ Cont	CT
COG-09803	3/29/2001	CT Thorax w/ Cont	CT
COG-09803	3/29/2001	PR3 Brain w/Tandem Contrast	PR3
COG-09803	3/29/2001	PR3 Bone Image whole Body	CT
COG-09803	3/29/2001	CT Thorax w/o Cont	CT
COG-09803	3/29/2001	PR3 Ocular/Face/Neck	PR3
COG-09803	1/14/2001	CT Pelvis w/ Cont	CT
COG-09803	1/12/2001	CT Neck w/ Cont	CT
COG-09803	1/12/2001	PR3 Brain w/Tandem Contrast	PR3
COG-09803	1/12/2001	CT Thorax w/ Cont	CT
COG-09803	7/14/2000	CT Thorax w/o Cont	CT
COG-09803	7/14/2000	PR3 Ocular/Face/Neck	PR3

- 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.

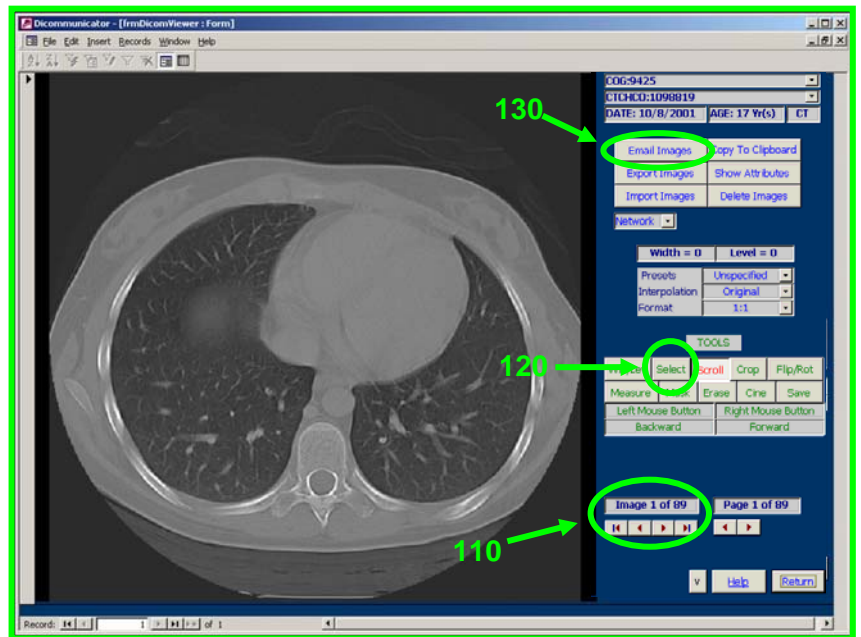
- 100 Choose [View Images]. The Dicommunicator Viewer will open.

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.

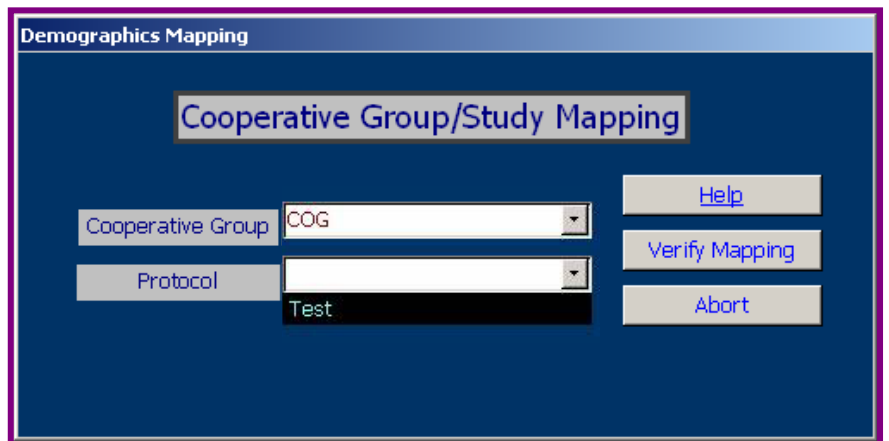
120 Choose the [Select] button from the 'Tools' section and right-click the image to select all images (they will outline in green) or left-click the image to select one image at a time (they will outline in red).

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

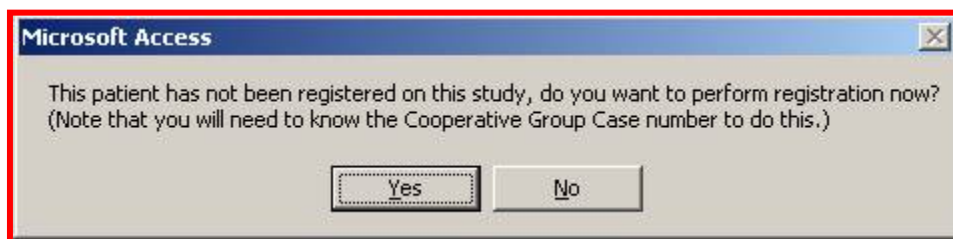
130 Once you have selected the images you would like to email, select the [Email Images] button located in the upper-right hand corner of the viewer page. A 'Cooperative Group / Study Mapping' form will open.



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 Dicomunicator.) Select [Verify Mapping].



150 If this is the first time you have emailed images for this patient, Dicomunicator 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 Dicomunicator 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 'QARC' (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 QARC (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 the CRA at QARC who is responsible for the protocol to notify him/her that the images have been sent to QARC via email using Dicommunicator. Ask the CRA to confirm that these images have been received.