Dicommunicator Overview

Description

IROC Rhode Island is able to receive imaging studies in digital format. The Dicommunicator software facilitates the submission of electronic diagnostic imaging (DICOM files). This software is a preferred method for submission. The installation of this software at COG institutions can be accomplished for very little cost to each institution.

Dicommunicator is compliant with the DICOM standard that allows for the query, retrieval, storage, printing, viewing, and transfer of electronic images. The software will ideally reside on a PC that has access to both the PACS system network and the Internet. It will allow the CRA to query or push studies from the PACS to his/her own PC and send selected studies to us via email. It is also possible to burn images to a CD. Submission by email has many benefits. Along with being an application that most computer users are familiar with, email also allows Dicommunicator to circumvent issues that arise with various firewalls when trying to use other forms of file transfer.

A major advantage of the Dicommunicator software is that it scrubs demographic (patient name) data from the images and replaces it with the protocol and patient registration number. The images are then encrypted before being sent over the Internet as email attachments. Dicommunicator can compress the images and allows the user to designate how many images will be attached per email message based on study modality. A study with many images will arrive as sequential emails. We do not have a size limitation for incoming email. In addition, Dicommunicator helps the CRA keep track of the studies that have been sent to IROC RI.

When the images arrive in our Dicommunicator Inbox, they are extracted from the emails and stored in a local archive. A program resolves these images to an existing Patient Record in our Database using the research demographics that previously replaced the patient’s name and medical record number making them viewable directly from the patient record.

Dicommunicator has an embedded viewer with additional tools that include: Window / Level, Scroll, Measure and Mask.

Dicommunicator offers a simple and user-friendly interface.
Dicommunicator Requirements

The PC that Dicommunicator runs on requires the following:

- Microsoft Windows (any version later than 95)
- Microsoft Access version 2000 or later loaded
- At least 128 MB of RAM (The more RAM, the better Dicommunicator will perform – RAM is more important than CPU speed for this application)
- On the same network as the PACS System Server
- Static IP Address
- AE Title (created by the PACS Administrator)
- Ability to access the Internet
- Ability to send Email
- PACS Administrator needs to be available for troubleshooting during the installation
- Administrative rights on the system during installation
- Full Control over the “C:\Program Files\Dicommunicator” directory created during installation
- CD burning capabilities (optional)

How Can I Get Dicommunicator?

To pursue a Dicommunicator installation at your institution…

1. Complete a PACS Questionnaire with information about your institution’s PACS system and submit it to IROC RI - you can obtain a copy of this form from the Dicommunicator section of the IROC RI website at http://www.irocri.qarc.org/dicommunicator.htm or by contacting IROC RI. (See below for Contact Information.)
2. Purchase a license for each installation of the software.
3. Select and configure the system on which you would like to install Dicommunicator. (See Dicommunicator Requirements above.)
4. Contact IROC RI to set up an appointment for a remote installation.
FAQ’s

Q: How much does Dicommunicator cost?
A: Dicommunicator was donated by its developer, Dr. Keith White, Primary Children’s Medical Center in Salt Lake City, Utah. Although the software itself is free, there is a one-time cost of $215 per workstation to install Dicommunicator on one workstation. This covers a licensing fee for the image viewer that is embedded in Dicommunicator.

Q: Does Dicommunicator come with hardware?
A: No. Dicommunicator is a software package. It will be installed remotely on the system that you have prepared.

Q: Can I have more than one version of Access installed simultaneously? (e.g. Access 2000 and XP)
A: Yes. It is possible to install and use more than one version of Microsoft Access on a system.

Q: Can Dicommunicator be used to send DICOMRT images?
A: No, Dicommunicator can only be used to view and send DICOM compliant imaging.

Q: There is a size limitation on the email attachment size that I can send. Does Dicommunicator account for this?
A: Since many institutions have a limit on the attachment size that it can send with emails, users can configure Dicommunicator to send emails with varying numbers of images. For example, if you email a study to IROC RI that has a size of 10MB, Dicommunicator will automatically break the scan into the appropriate number of images so that any set outgoing size limit is not exceeded. If the size limit was 2 MB for outgoing emails, five emails would be sent, each with a 2 MB attachment.

Q: Is Dicommunicator HIPAA compliant? Does my institution need to have a Business Associate Agreement (BAA) in place with IROC Rhode Island?
A: Dicommunicator is HIPAA compliant. Dicommunicator scrubs demographic (patient name) data off of all images before they are emailed or burned to a CD. In addition, each patient that is enrolled on a study signs a form acknowledging that their information can be released for research purposes. You do not need to have a BAA with IROC RI because IROC RI is not a business associate of your institution. Furthermore, the Health & Human Services (HHS) Office of Civil Rights has stated that disclosures of protected health information from a covered entity to a researcher for research purposes do not require a BAA.

For additional information please contact:

IROC RI
Phone # (401) 753-7600    Fax # (401) 753-7601
Email: Dicommunicator@qarc.org