

FAQ's For Digital Data

What is a Secure FTP (SFTP) account and how do I get one?

Secure FTP Account

- A Secure FTP (SFTP) account allows your institution to send electronic digital data (exported from your treatment planning system) to IROC RI.
- Secure FTP (SFTP) uses the SSH network protocol and offers several advantages over FTP, including secure (encrypted) transport of usernames, passwords, and data, and compatibility with most firewall configurations.
- Only one account is issued to an institution and is used for all studies that require digital data to be sent to IROC RI.

Obtaining an SFTP Account on the IROC RI Server

• To obtain an SFTP on the IROC RI server, please fill out and submit the request form

Please allow three business days for the account to be created. When the account is ready, you will be notified.

How do I connect to the IROC RI SFTP server?

IROC RI uses a Secure FTP server to receive digital imaging and treatment planning data from institutions participating in clinical trials.

What is my username and password?

 Please contact IROC RI (401-753-7600) to obtain your IROC RI SFTP account username and password. For security purposes we cannot provide passwords through email.

What is the server address?

 Digital data submissions use the IROC RI Secure FTP server, sFTP.qarc.org (IP address: 174.67.111.241).

What SFTP Client Software do I need?

- SFTP client software, for example WS_FTP Professional (commercial), is broadly available.
 For Linux systems, both graphical (gftp) and command-line (sftp) programs are included with most distributions.
 - Please review <u>Instructions for configuring SFTP clients</u> on the IROC RI website for more information and detailed instructions.
- Please visit: <u>Uploading Digital Data to IROC RI via Secure FTP (SFTP) or CD</u> on the IROC RI website for more detailed instructions.



What if I am having trouble connecting to the server?

- Problems in connecting to the IROC RI SFTP server may be caused by your institution's firewall configuration. An outbound connection from your computer to TCP Port 22 on host sFTP.qarc.org (IP address: 174.67.111.241) is required. (Although allowing such a connection is safe, it is sometimes disallowed by default.) Please consult your local firewall/network administrator.
- If problems persist, please contact IROC RI for assistance.

How do I notify IROC RI of my sFTP submission?

Send e-mail to <u>sFTP@qarc.org</u> to indicate that you have uploaded protocol case data. Please identify the study group, protocol, and case number for the submission as well as your contact information.

What data exchange formats does IROC RI accept?

Digital treatment planning data for NCTN clinical trials should be exported from a treatment planning system (TPS) and sent to IROC RI as **DICOM RT.** At this time (March, 2015) **RTOG Data Exchange Format** is still being accepted at IROC RI from sites that do not have DICOM RT export capability.

Please refer to the table of <u>Treatment Planning System Export Capability Per Modality</u>. Systems listed in this table are those from which institutions have submitted complete, reviewable digital data sets to IROC St. Louis.

What does a digital treatment plan consist of?

For each credentialing or protocol case submission, Digital Treatment Planning Data (in DICOM RT or RTOG Data Exchange Format) is to be submitted via Secure FTP, or may be written to a CD.

A complete DICOM RT data set would include:

- Planning CT image files
- Structure file (the file name often starts with the letters "RS")
- Plan file for each individual plan (the file name often starts with the letters "RP")
- Dose file for each plan (the file name often starts with the letters "RD"). Dose should be in absolute dose units (cGy or Gy). A composite dose distribution will be created at IROC RI for plans submitted separately.

A complete RTOG Data Exchange format data set would include:

- The header file (the file name will end in "0000")
- Planning CT image files
- Structure files (one file per structure)
- Beam geometry files for all individual plans (one file per beam)
- Dose files (one file per plan) dose should be in absolute dose units (cGy or Gy)
- Dose Volume Histogram files volume should be in absolute units (cc)



Are DRRs and MU calculations included with the digital plan?

While these items are sometimes thought to be exported with the digital treatment planning files, they do not contain all the information needed to complete a Dosimetry review.

<u>DRRs:</u>

- For submissions in **RTOG format**, screenshots of DRR's should be submitted when DRR's are required.
- For **DICOM RT** submissions, DRR's exported from the planning system are acceptable only if the MLC configuration has been "burned" into the DICOM image (e.g. Pinnacle). If this is not the case and DRR's are required, screenshots should be submitted.
- **Portal images** are usually not included in the digital plan export and will require submission of screenshots when required.

<u>MU Calculations</u>: While some beam data is exported in the digital plan files, the treatment plan printout provides more comprehensive calculation data that is needed for review.