Windows Client Installation and User Guide

TRIAD v4

Clinical Trials
Hardware & Software Requirements

Hardware requirements (recommended):

- 2 GB RAM
- 2.4 GHz Processor
- 60 GB Hard Disk space

Software requirements:

- Microsoft .NET 4.5 Framework Full Version (requires administrative privileges on the computer to install)
- OS: Windows 7 (32 or 64 bit)
Installation

- Please open the following link to install TRIAD 4 Windows Client:
  
  https://triadinstall.acr.org/triadclient/

- TRIAD will launch after the installation is completed successfully.
Login to TRIAD

- Users will need to have accounts to login to TRIAD
- There are two different ways to login to TRIAD:
  - CTEP-IAM account:
    - Users will need to have CTEP-IAM accounts with proper TRIAD user role to login to TRIAD for Clinical Trials (NCI Oncology). To receive a CTEP-IAM account, please use the following link https://eapps-ctep.nci.nih.gov/iam to get a CTEP-IAM account and contact your site lead RA to get a TRIAD role assigned.
  - TRIAD account:
    - Users who will submit images for trials that are not Clinical Trials (NCI Oncology) will need to get a TRIAD account to login. Please go to: https://cr-triad4.acr.org/TRIADWeb4.0/ to register for an account.
- Same user may potentially have trials that will require them to login to TRIAD using both IDs.
Login to Clinical Trials Domain

Use the Username and Password that you have received when registered on TRIAD website.

Click on Forgot Password to receive a link by email to reset new password.
Login to TRIAD Clinical Trials (NCI Oncology) Domain

Use your CTEP IAM account to log into TRIAD Clinical Trials (NCI Oncology) domain.
Select Site & Trial Information

- Site/trial are from RSS for CTEP trials

**Select the Site & Trial from the dropdowns for which the files are to be uploaded**
Submission Sources

- TRIAD provides features for submitting files from multiple sources:
  - Local computer / network drive: Files can be located in local computer folders, local CD/DVD drives or network drives. There are two ways to get upload data:
    - Files: User can select single or multiple files
    - Folders: User can select a folder and by selecting folder, all files in the folder will also be selected automatically
  - PACS: TRIAD has ability to query PACS for the study to submit
Submit Files from Computer / Network Drive
Submit Files from PACS (1/8)

Select ‘Choose Files from PACS’ and click ‘Choose Files’ button to open a new window to search for images in PACS.

Click ‘Manage’ to add information of PACS from where you will retrieve files.
Submit Files from PACS (2/8)

- Click on “Actions” from the top menu and select “Settings”

- In the Settings window, click on DICOM Server
Submit Files from PACS (3/8)

- Parameters on this window should be provided to external DICOM device / PACS for connectivity. You can also update them as needed.
Select ‘Choose Files from PACS’ and click ‘Choose Files’ button to open a new window to search for images in PACS.

Click ‘Manage’ to add information of PACS from where you will retrieve files.
Submit Files from PACS (5/8)

- Click “Add” in the pop-up window and provide details for your PACS
- Click “Test Connection” to verify the connectivity
- Click “Save” to save device details and close the window
Submit Files from PACS (6/8) – Query / Retrieve

Select PACS from dropdown

Provide the ‘Search’ details (Patient ID is mandatory) and click on ‘Search Images’

Select the images from search results by clicking the checkboxes

Click on ‘Select Images’ to load the selected files into TRIAD preview panel.
Submit Files from PACS (7/8) -- Listen

- You can send files directly from your DICOM device
- Make sure that “Select Images” window opened before sending the images from the DICOM device
Select Files from PACS (8/8)

Select the images from search results by clicking the checkboxes.

Click on ‘Select Images’ to load the selected files into TRIAD preview panel.
Files selected from Computer/PACS are loaded into TRIAD preview panel
Click on ‘+’ icon to expand the DICOM study and view all the series in that study
**View Images**

- You can view the images loaded in the preview panel before moving them to “Submission Queue”.
- Double click on the thumbnail to view images in series by using default “QC Viewer”.

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**Diagram:**

- The diagram shows a section of a software interface for viewing and managing DICOM images for a specific study.
- It includes columns for DICOM Study, Study Description, Study Date, Image, Study Time, Modality, Accession Number, and more.
- There are options to choose files from the computer or PACS.
- Instructions on how to double click on the thumbnail to view images in series.
- Notes: Double click to view all images belongs to this series. For RT modality use study level.
Clean Pixel Data

You may clean any patient data that may be on the images by using ‘Clean Pixel Data’ feature. The clean pixel data tool propagate across all images in the series.

Open the clean pixel data window by clicking ‘Clean’ button.

Draw a rectangle that would cover the data.

Click ‘Apply Pixel Data Cleanup’ icon to clean the area selected.
Add Attachments

You may add non-DICOM files, such as anonymized reports, at study or series level by clicking ‘Select’ in the ‘Attachment’ column.
View DICOM Metadata

Click ‘View’ in the Metadata column to open the series metadata for the DICOM files in the preview panel.
Add Comments

You can provide comments for each series by clicking “Comments” link. Click ‘Save’ after entering comments in the pop-up window.
Move for Submission

Select the series / series that are ready for submission by clicking the check boxes.

Click ‘Move to Submission Queue’ button to move the studies to Submission Queue.
Submission Types

CLINICAL TRIALS – This submission type is used for almost all the submissions for trials. It’s used when patients are enrolled for the trial and a valid Subject ID is available. Actual patient images will be need to be submitted when this submission type is selected.

QUALITY ASSURANCE – Sites may need to submit images with quality assurance submission type to verify that they are following the trial protocol prior to starting to submit patient images for trial. Subject ID is created automatically for this submission type.

TEST SUBMISSION – Sites may use this type to submit test images to verify that system is working as expected. Subject ID is created automatically for this submission type.

BENCHMARK SUBMISSION – Sites will use this submission type for site credentialing mainly for RTOG. Subject ID is created automatically for this submission type.
Submission Queue

SUBMISSION: Clinical Trials Domain
Verify all the studies are moved into Submission Queue.

Enter the proper subject ID in “Subject ID” field in the Submission Queue. TimePoint ID and TimePoint Description fields are optional.

Verify all the columns shown in the queue

Submission Type for Clinical Trials Domain

Select the Submission type from the dropdown.

- Clinical Trial -- default
- Test Submission
- Quality Assurance
- Benchmark
Submission Queue

SUBMISSION: Clinical Trials (NCI Oncology) Domain
Select the subject ID from the dropdown field coming from the RAVE system in the Submission Queue.

Select the Time point ID from the dropdown field coming from the RAVE system in the Submission Queue.
Verify all the columns shown in the queue.
Submission Type for Clinical Trials (NCI Oncology) Domain

Select the Submission type from the dropdown.
- Clinical Trial -- default
- Test Submission
- Quality Assurance
- Benchmark
Submission Queue -- Anonymization Result

You may view DICOM header anonymization results by clicking ”Anonymization Result” button. Both the Original Value and De-identified value are shown in the results pop-up windows.

An ‘Export’ button is also available to export the anonymization results in the form of pdf or word document and save it in your computer.
1. Click the “Validation Result” to check whether the series have the values to satisfy for the requirements of the trial.
2. You may also check how many of the series are in Range or Out of range of the validation parameters and how many are not validated.
3. System will allow you to submit the studies irrespective of the validation result.

Click to Check the validation result for RT structure.
Validation Result for RT structure
Click “Complete Submission” when you are ready to submit the files to ACR.

Anonymization and validation will be done in the background even if you did not select “Anonymization Result” or “Validation Result” before.

System shall change the status to ‘Green Color’ after the files are submitted successfully.
TRIAD Support

- If you have any questions or issues, please contact ACR TRIAD support services
- Support Hours: 8am – 5pm EST Monday – Friday except ACR observed holidays
- Support contact:

  ✓ For RT trial submissions with TRIAD-specific questions please contact TRIAD-Support@acr.org or 703-390-9858
  ✓ For Imaging trial submissions with TRIAD-specific questions please contact TRIAD-Support@acr.org or 215-940-8820