



GRP4 Uploading Data To XNAT

PURPOSE OF THE PROCEDURE

To outline the steps required for importing data into XNAT in a standardised and supported way.

APPLICABILITY

This procedure applies to trial technicians who are uploading data into an XNAT project supported by the Australian Centre for Quantitative Imaging/Australian Imaging Service.

RELATED PROCEDURES

| Procedure Number | Scope |
|------------------|---------------------------|
| GRP1 | Gaining access to XNAT |
| GRP2 | Managing a project |
| GRP3 | Preparing Data For Upload |
| GRP5 | Performing Data Review |
| GRP6 | Analysing project data |

PROCEDURES

Create Subjects/Participants

NB: subjects can be created via the desktop uploader instead

- Log into [XNAT](#)
- Select New->Subject
- Enter values for desired fields

PROCEDURE TESTS

| Test description | Test completed | Pass/Fail | Comments |
|---|----------------|-----------|----------|
| Can Select menu option to Create New Subject | | | |
| Can fill out desired fields | | | |
| Can see the subject listed in the Desktop client after logging in and selecting the correct project | | | |

Prepare Image Sets for upload

Ensure that data is processed in accordance with GRP3.

Set up XNAT Desktop Client (Required once per machine used for uploading with one exception)

- Downloaded and install the client found [here](#)
- Open the client and select “ADD NEW XNAT SERVER”
- Set the URL to <https://instance-146-118-67-25.nimbus.pawsey.org.au>
- Enter your username and password and then click “Login”
- Select the gear symbol in the top right corner of the screen.
- Click the “User Settings” tab
- Set the “Upload mode” to zip

PROCEDURE TESTS

| Test description | Test completed | Pass/Fail | Comments |
|--|----------------|-----------|----------|
| Can install the client | | | |
| Can add a new server | | | |
| Can log in | | | |
| Can set the “upload mode” setting to zip | | | |

Upload images

- Open the desktop XNAT Client
- Click on your saved link to the xnat server (<https://instance-146-118-67-25.nimbus.pawsey.org.au>)
- Enter your username and password and click Login or press enter
- Select “Upload Files”
- Select the project you want to upload data to
- Select Subject: Either
 - Select an existing subject or
 - click “Create a new Subject” if the subject does not exist yet.
 - Enter the Subject ID
 - Enter the subject’s research group if applicable
- Choose upload folder and click next
- Modify the values in any fields if needed. For example for PET images you will need to select a tracer.

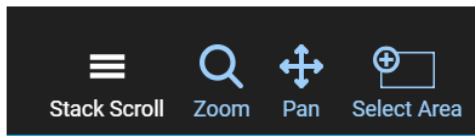
The screenshot shows the XNAT Desktop Client interface. The main window title is "XNAT Desktop Client" and the browser address bar shows "instance-146-118-67-25.nimbus.pawsey.org.au". The "Upload Image Session" dialog is open, displaying the following information:

- Project:** PT2
- Subject:** subject_12
- Set tracer:** PSMA
- Experiment Label (Session):** subject_12_PSMA_1
- UploaderEmail:** (empty field)
- UploaderName:** (empty field)

At the bottom of the dialog, there is a confirmation message: "Confirm The Scans To Be Uploaded" and buttons for "Cancel", "< Prev", and "Next >".

- Click next

- An image viewer will show your images. It will allow you to remove burned in PHI if needed.
 - Select “Stack Scroll” to scroll through image slices



- Select “Select Area” to choose a rectangular area to erase
 - Select “Save scan” to save
- Select “Finish and Upload” to start upload process

The screenshot shows a web application interface with a table titled 'Upload Progress'. The table has columns for Session, Session Date, Transfer Date, Status, and Log. The data rows are as follows:

| Session | Session Date | Transfer Date | Status | Log |
|-------------------|---------------------|---------------------|----------------------------|---------|
| subject_10_PSMa_1 | 2020-01-02 08:30:26 | 2021-08-20 13:20:31 | Progressing (5 green bars) | Details |
| subject_10_F18_1 | 2021-04-13 19:25:58 | 2021-08-19 13:28:49 | Completed | Log |
| subject_9_CT_1 | 2020-01-02 08:30:26 | 2021-08-19 10:29:09 | Completed | Log |
| subject_8_CT_1 | 2020-01-02 08:30:26 | 2021-08-19 10:20:01 | Canceled | Details |
| subject_7_MR_1 | 1990-01-01 08:08:01 | 2021-08-17 12:09:04 | Archiving... | Details |
| subject_7_MR_1 | 1990-01-01 08:08:01 | 2021-08-13 15:15:12 | Completed | Log |
| subject_6_MR_1 | 2020-01-02 08:30:26 | 2021-08-13 14:23:50 | Canceled | Details |
| subject_5_PSMa_1 | 2020-01-02 08:30:26 | 2021-08-13 14:13:20 | Completed | Log |

- Select Details to see further upload details

The screenshot shows a 'Transfer log' dialog box with the following content:

Upload success!
 studyId: 3070
 studyInstanceUid: 1.2.840.3070
 studyDescription: RADAR patient 3070
 modality: MR,RTDOSE,RTPLAN,RTSTRUCT
 studyDate:
 studyTime:
 Total files: 35 (25.6 MB)
 Session Link
 Anon variables:
 • project: Pt1
 • subject: asdfasdfsdf
 • experiment_label: asdfasdfsdf_MR_1

Buttons: Close, View Log, Save log as CSV

- Click “Session Link” in the transfer log to view the dataset in xnat.

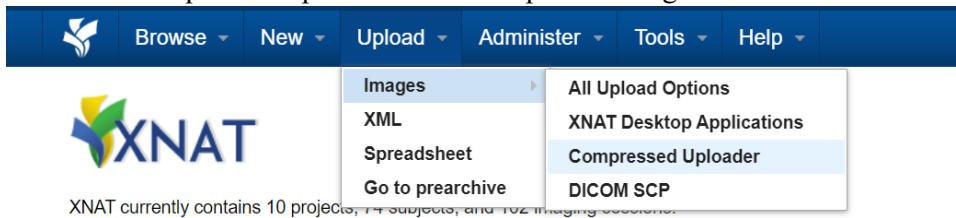
PROCEDURE TESTS

| Test description | Test completed | Pass/Fail | Comments |
|---------------------------------|----------------|-----------|----------|
| Can login to saved server setup | | | |
| Can select “upload files” | | | |
| Can select project to upload to | | | |
| Can select subject to upload to | | | |

| | | | |
|---|--|--|--|
| Can create a new subject to upload to | | | |
| Can select upload folder | | | |
| Can set any required values and chose which scans to upload | | | |
| Can check for burned in PHI | | | |
| Can remove burned in PHI | | | |
| Can upload successfully | | | |
| Can use link to view uploaded data in XNAT | | | |

Uploading Via a Web Browser

- Zip you plan files up
- Log in to the XNAT server (<http://instance-146-118-67-25.nimbus.pawsey.org.au/>)
- Select the Compressed Uploader from the Upload->Images menu



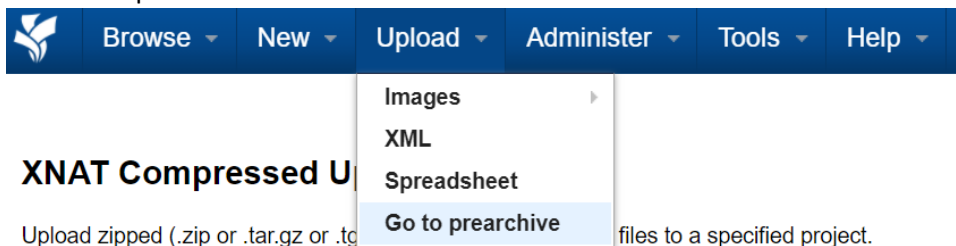
- Select your project
- Select Prearchive as the destination (This is important!)

Project

Destination Prearchive Archive

File No file chosen

- Choose your zip file
- Click begin upload
- Got to the prearchive



- Find the plan(s) you just uploaded. The Filters Menu on the right is helpful here. For example you could look for plans uploaded on the current date.

Filters

Projects:

Upload Date:

Scan Date:

| January 2022 | | | | | | | |
|--------------|-----|-----|-----|-----|-----------|-----|-----|
| | Mon | Tue | Wed | Thu | Fri | Sat | Sun |
| 52 | 27 | 28 | 29 | 30 | 31 | 1 | 2 |
| 01 | 3 | 4 | 5 | 6 | 7 | 8 | 9 |
| 02 | 10 | 11 | 12 | 13 | 14 | 15 | 16 |
| 03 | 17 | 18 | 19 | 20 | 21 | 22 | 23 |
| 04 | 24 | 25 | 26 | 27 | 28 | 29 | 30 |
| 05 | 31 | 1 | 2 | 3 | 4 | 5 | 6 |

Status:

Subject/Session:

- Check the box next to one of your uploaded sessions
- Click Review and Archive from the actions menu on the right

Actions

Actions are performed on checked sessions.

- Select the patient trial ID from the Subject selection Menu or chose to create a new subject with using the patient trial ID if one doesn't already exist

PROJECT: P

Add New Subject

Project:

Subject:

Session:

- Rename the session using the following format: patient trial id_ImageType_number, where the number would be 1 and increase for each subsequent image for that patient of the same modality. For example

Project: Test

Subject: testphantom

Session: testphantom_MR_1

If the number has been used already then red text will appear telling you that the session ID already exists. In this case use the next number.

- Click Submit

PROCEDURE TESTS

| Test description | Test completed | Pass/Fail | Comments |
|---|----------------|-----------|----------|
| Check that you can upload a zipped dataset to the pre-archive | | | |
| Test that you can locate the uploaded dataset in the prearchive | | | |
| Test that the correct subject can be selected or created | | | |
| Test that you can set the session name using the specified format | | | |
| Check that you can archive the dataset | | | |

DOCUMENT HISTORY

| Author | Version | Effective Date | Changes |
|-----------------|---------|----------------|--|
| Angel Kennedy | 1 | 17/08/2021 | Initial release |
| Angel Kennedy | 2 | 25/10/2021 | Update for AAF authentication |
| Angel Kennedy | 3 | 19/11/2021 | Remove AAF authentication |
| Christel Norman | 4 | 14/02/23 | Added ACQI logo, updated site address throughout |