GRP 2 Managing Projects & Users in XNAT

PURPOSE OF THE PROCEDURE

This procedure outlines the steps required to create, manage, and administer projects and users within the ACQI-XNAT platform.

It ensures that project structures, access permissions, and user roles are managed in a standardised, secure, and auditable manner in accordance with ACQI governance and data management requirements.

SCOPE

This procedure applies to:

- Personnel (i.e. Project Owners, Trial Managers, and Data Managers) responsible for managing imaging projects hosted in ACQI-XNAT; and
- Personnel conducting clinical trials or imaging research supported by the Australian Centre for Quantitative Imaging (ACQI) and/or the Australian Imaging Service (AIS).

DEFINITIONS

Term	Definition
ACQI-XNAT	The instance of the XNAT imaging informatics platform hosted by the Australian Centre for Quantitative Imaging (ACQI) on Pawsey Supercomputing Centre infrastructure.
Automation/Event Service	A system configuration in XNAT that enables automatic data handling, notifications, or transfers based on specific user or system actions.
Data Deletion	The process of permanently removing project data and related backups from XNAT, undertaken in collaboration with the Site Administrator at the conclusion of a project.
Private Project	A project that is not visible to other XNAT users unless they have been explicitly granted access by the Project Owner.
Project Member	A registered XNAT user who has been granted access to view or contribute data within a specific XNAT project.
Project Owner	The individual responsible for the overall management and integrity of a project within XNAT, including user access, data governance, and compliance.
Site Administrator	The designated ACQI personnel responsible for XNAT platform maintenance, access authorisation, and support for project setup and closure.
XNAT	Open-source imaging informatics software designed to facilitate the management, sharing, and analysis of imaging and related data across research projects.

RELATED PROCEDURES

Procedure Number	Scope
GRP1	**Gaining Access to XNAT**
GRP3	**Preparing Data for Upload to XNAT**
GRP4	**Uploading Data to XNAT**
GRP5	**Performing Data Review**
GRP6	**Analysing project data**
GRP7	**Uploading Additional Data**

BACKGROUND

The ACQI-XNAT platform is a secure, cloud-based repository hosted by the Pawsey Supercomputing Centre. It supports the storage, management, and sharing of imaging data for clinical trials and quantitative imaging research across Australia.

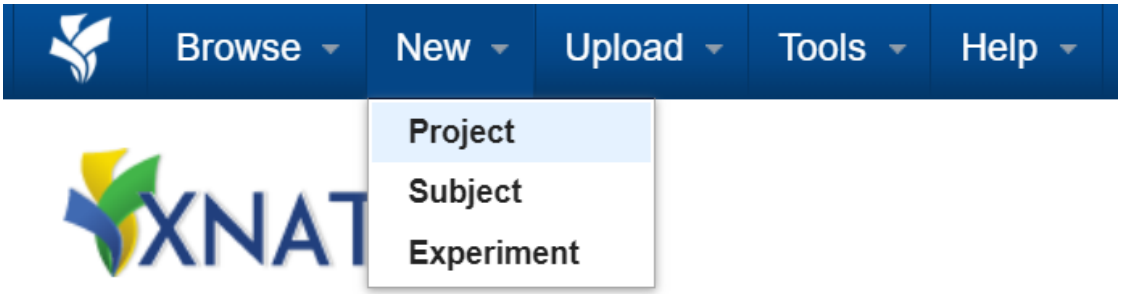
Proper project and user management ensures that data is stored securely, that access is granted appropriately, and that project configurations support standardised workflows and ethical data handling.

PROCEDURES

Creating a project

For detailed XNAT system documentation is available here XNAT Documentation: Creating and Managing Projects (https://wiki.xnat.org/documentation/creating-and-managing-projects).

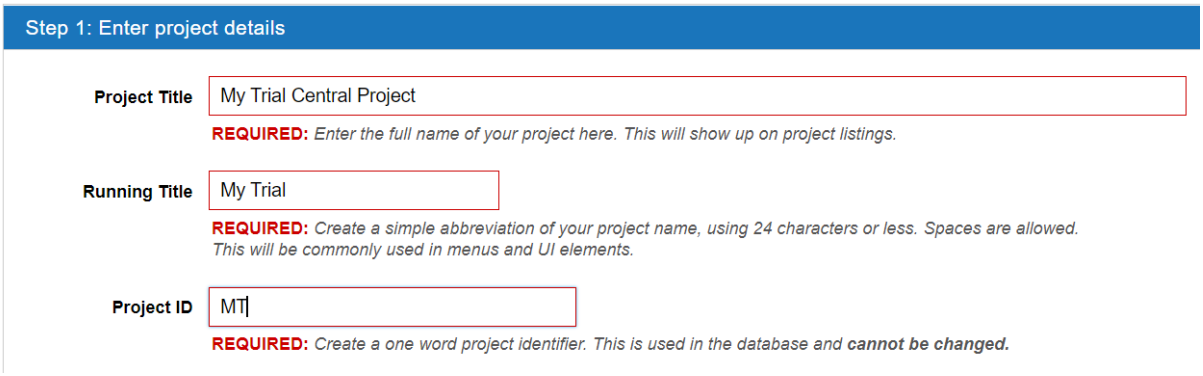
- Log into ACQI-XNAT
- From the top menu, select New -> Project



- Fill in the required fields. The required fields are:

Project Title	The full title of your project, which will appear in the site-wide project listing.
Running Title	This is an abbreviated project name, which will appear in search listings and data tables.
Project ID	This ID is used within the XNAT database and in all API, calls related to your project and its data. Once set, it cannot be changed.

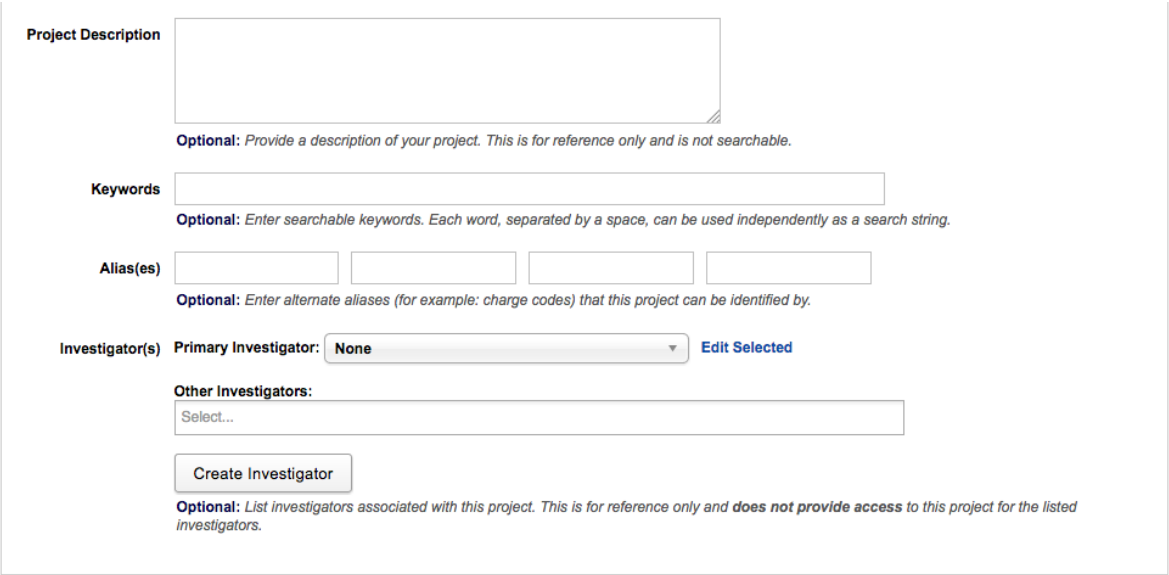
New Project



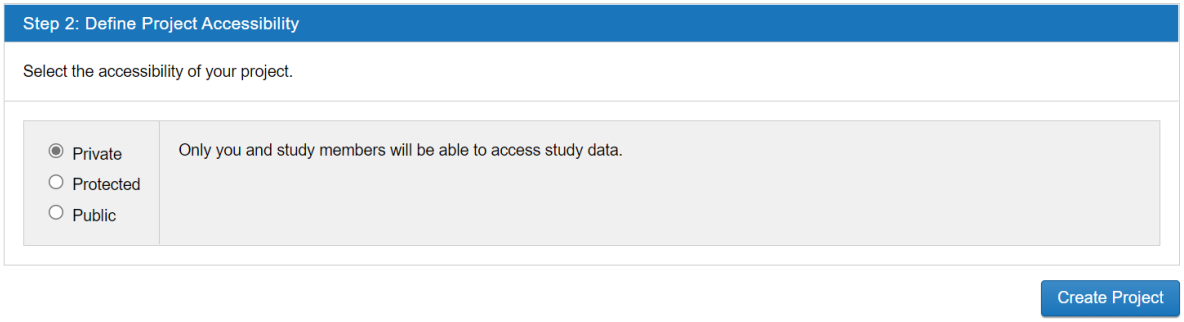
Please refer to Appendix B, for the Trial Naming Conventions.

- Fill in any additional fields as desired. The optional fields are:

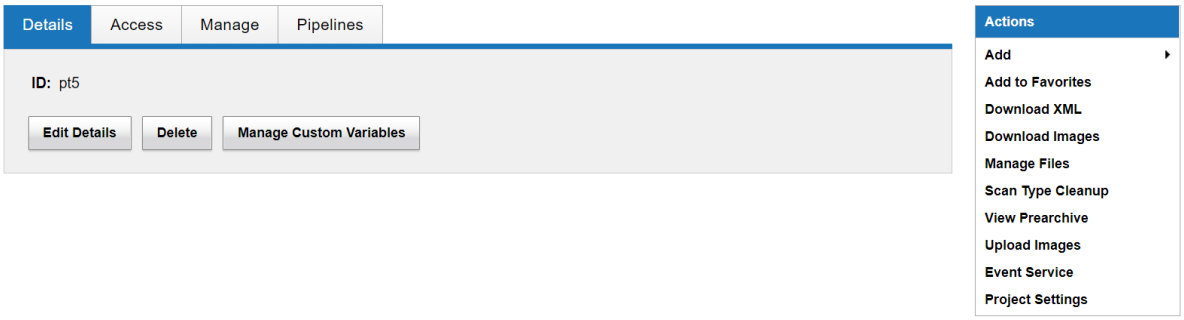
Description	Add as much detail as you like describing your project. This will show up in the project page, and in the site-wide project listing.
Keywords	Keywords can be searched for in the primary search field and can help you find project data in an XNAT system with many projects.
Aliases	These are optional project identifiers. A common reason to use them would be for billing codes.



- Ensure your project is set to private and click “Create Project”



- Once your project is created you will be taken to a screen for the project like this



Managing Users

As an owner you can add or remove users to/from your project or change their role in your project.

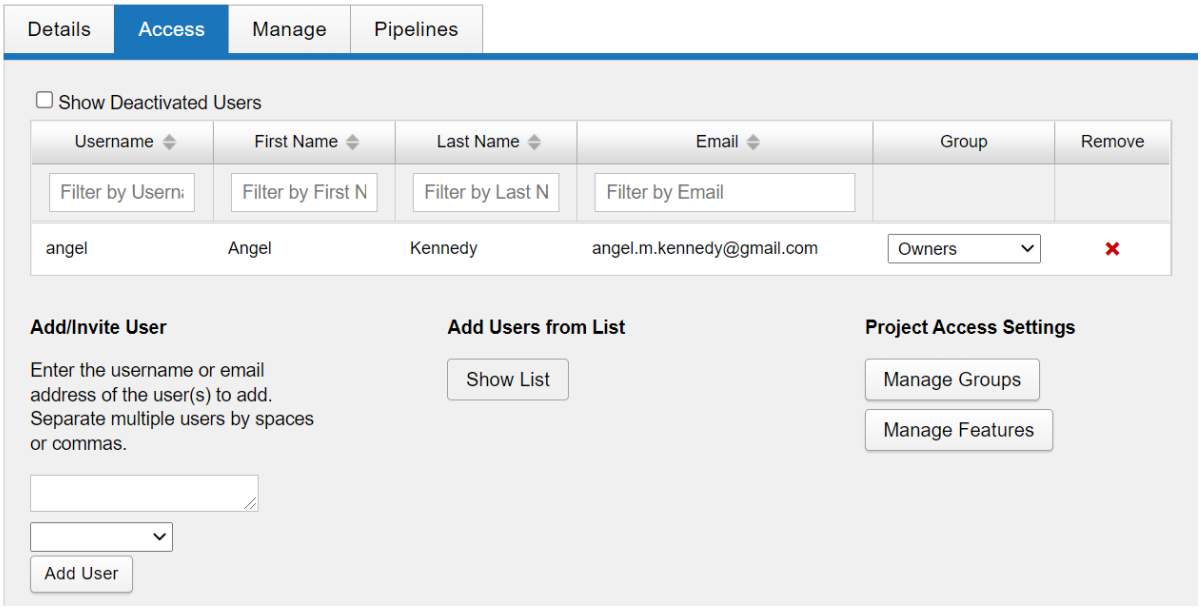
As a Project Owner, you are responsible for:

- Adding and managing users for your project.
- Ensuring user access aligns with ACQI's Data Access and Security Policy.
- Maintaining an up-to-date log of authorised users.
- Completing the ACQI Annual Declaration of Compliance.

Adding or Inviting Users

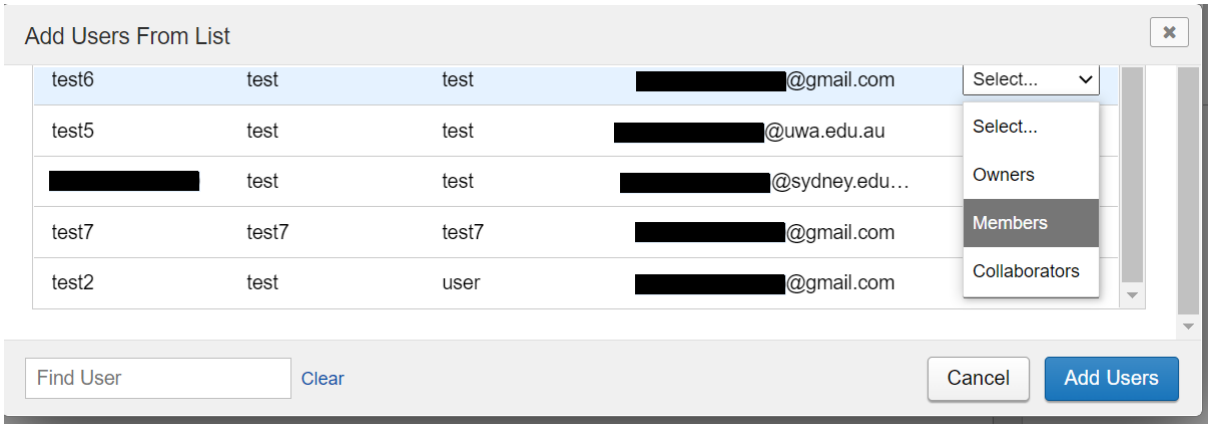
For this process, users must already have an XNAT account which can be obtained as described in GRP1.

1. Go to the Access tab and click Show List.



2. Search for the user's email or name.

3. Select the user(s) you wish to add and assign their role (please refer to Appendix C for further details on roles).



4. Click Save Changes.

Note: Roles define what actions a user can perform within a project (e.g., upload data, perform QC, analyse results). See Appendix C for details.

Managing Access and Permissions

1. Only the Project Owner and Site Administrator can modify user access rights.

2. Roles can be adjusted at any time under the Access tab.

3. Always apply the principle of least privilege – grant users the minimum level of access required for their role.

4. Review project user access at least annually or when staff leave or change responsibilities.

User Access Review Requirements

- Maintain a record of all users and roles (downloadable from XNAT's "Access" tab).
- Revoke access immediately when staff no longer require it.
- Group accounts (if used) must have a clearly assigned responsible person (see GRP1).p

Enabling additional functionality for your project

Certain automations and extensions (e.g., auto-sharing, data QC, notifications) can be activated for your project.
To enable these:

1. Contact the Site Administrator at admin-acqi-med@uwa.edu.au.
2. Discuss the available Event Service automations and indicate your project requirements.
3. The Site Administrator will configure, and test automations, as needed.

Automations must be validated before production use. Any custom setup must be documented within your project metadata.

Deleting your project and data at the end of trial

At the end of a clinical trial or project, the Project Owner and/or Trial Manager is responsible for ensuring that all data are securely deleted.

Deletion includes both the primary project data and any backup copies.

Steps:

1. Notify the Site Administrator at admin-acqi-med@uwa.edu.au that the project has concluded.
2. Request formal data deletion and provide written confirmation from the sponsor or study PI.
3. The Site Administrator will ensure that:
    - All project data and backups are deleted securely.
    - Confirmation of deletion is logged.
4. Retain a record of deletion approval for study closeout documentation.

Appendix A: Project structures for trials

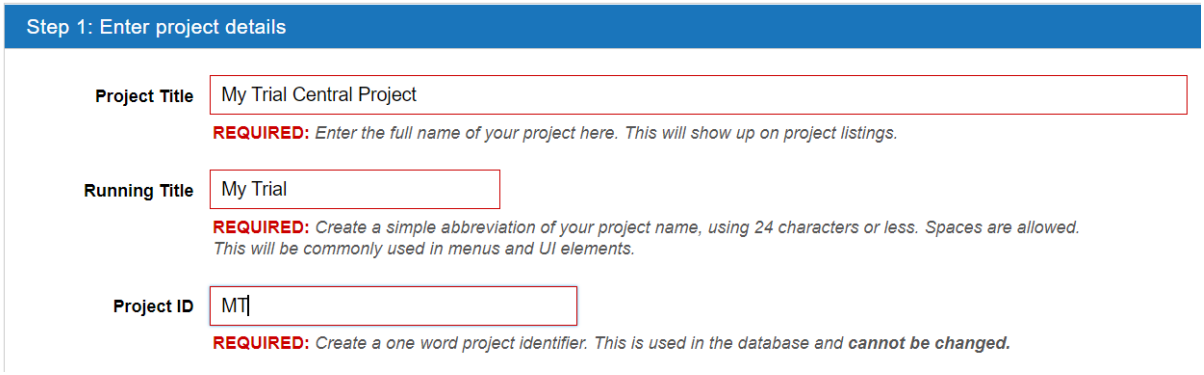
Different trial types may require distinct project structures depending on data volume, site participation, and access needs.

Structure Type	Description	Advantages
Single Project	All imaging data uploaded to one central project. All users have access to all data.	Simplified management and analysis.
Site Projects + Central (optional)	Each site uploads data to its own project; optionally, the data is shared into a central project once a central reviewer has reviewed the data or automatically.	Site-specific control; privacy between sites.
Central + Site + Initiation Projects	Each site has both a trial data project and a separate site initiation project.	Separates initiation/qualification data from trial data; supports multicentre oversight.

Appendix B: Naming conventions for projects

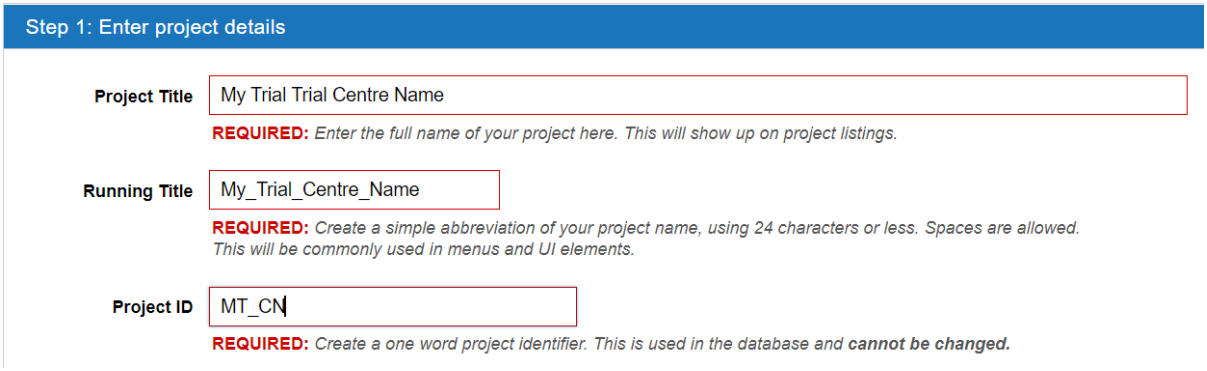
Central Projects

New Project



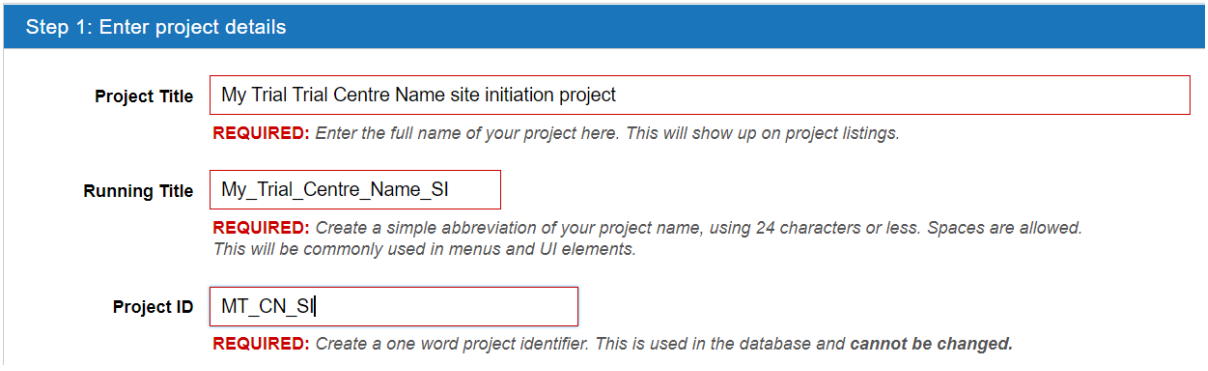
Site Projects:

New Project



Site Initiation Projects:

New Project



Appendix C: User roles and permissions

By default, XNAT defines three common project roles: Owners, Members, and Collaborators. As a project owner, you have the ability to add specific users to your project within these roles. These users will then have the permissions associated with their defined role (which overrules the default accessibility permissions).

Role/Activity	Project Owners	Project Members	Project Collaborators
Create Data	**C**	**C**	
Read/Download Data	**R**	**R**	**R**
Update Data	**U**	**U**	
Delete Data	**D**		

The "CRUD" model of permissions:

Project Owners: If you define additional project owners, they will have all of the permissions on your project that you do. They can read, insert, modify, and delete anything (and everything) associated with your project. They can also add additional users to your project and modify the data types associated with your project.

Project Members: Members have the ability to manage the data in your project. They can read, insert, and modify subjects and experiments in your project. They cannot modify the project users and data types.

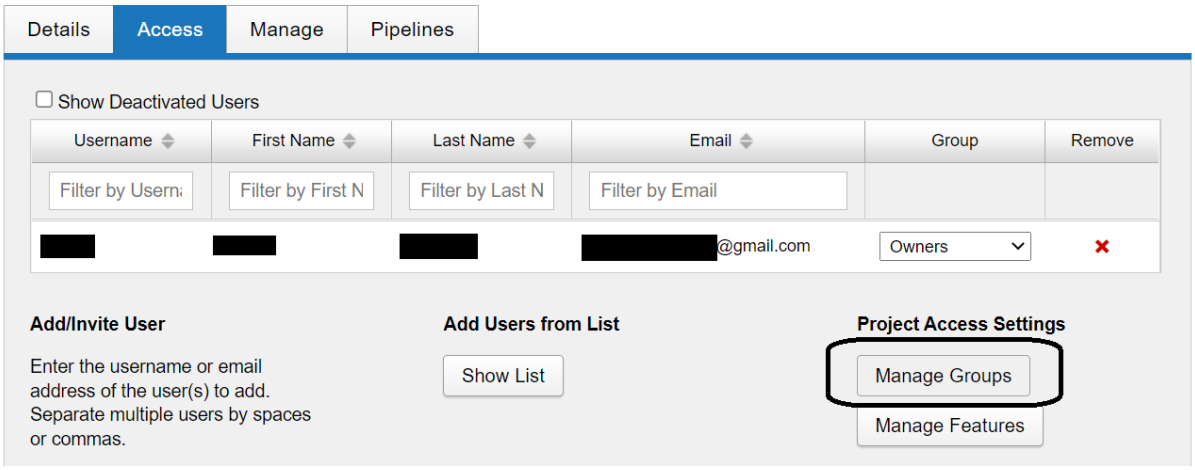
Project Collaborators: Collaborators have read-only access on all of the data in your project. They cannot insert or modify data owned by your project. They can download your data and use it within their projects.

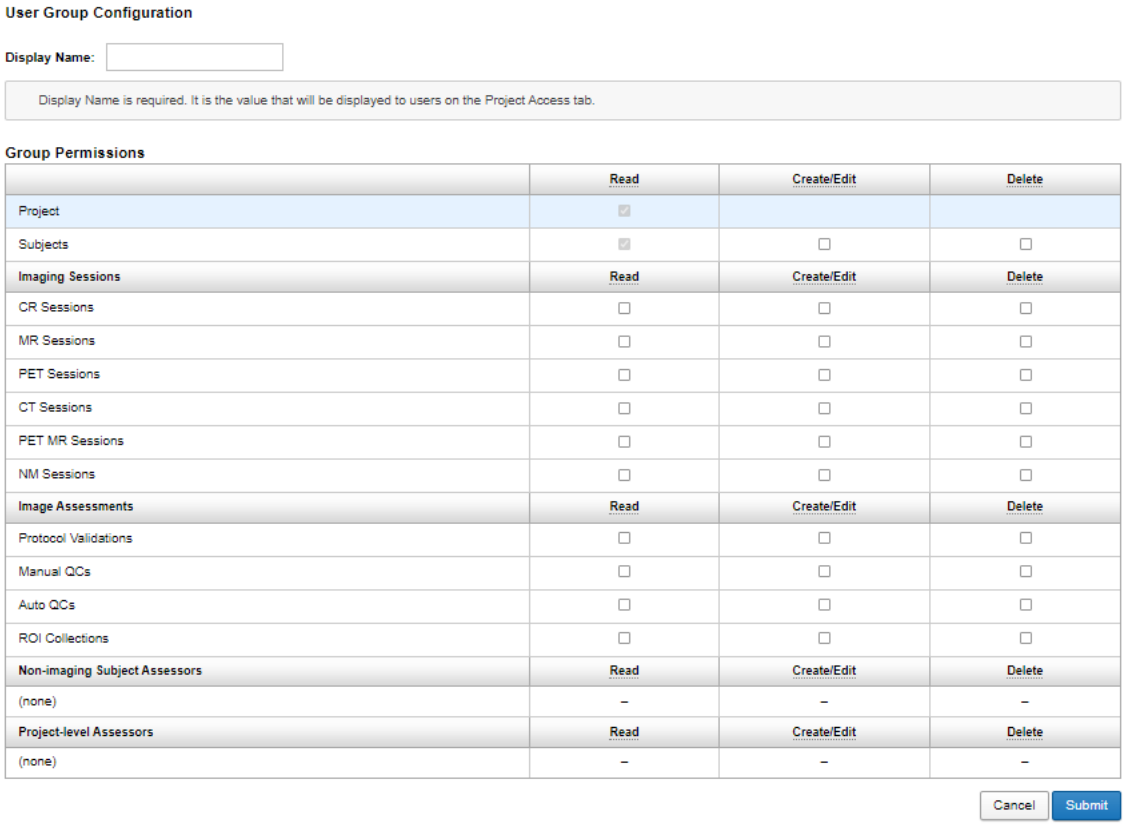
These roles can be **customised** to an extent by selecting “Manage Features” from the “Access” tab in your project. You will get a form such as the one below.

pt5

Project	Group	Configurable Resource Uploader	File Manager	MR Tagged Upload	Quarantine Review	Resource Quarantine	Upload Additional Scans
pt5	Owners	⊟	⊟	☐	☐	☐	☐
pt5	Members	⊟	⊟	☐	☐	☐	☐
pt5	Collaborators	⊟	⊟	☐	☐	☐	☐

Any Roles not listed here are custom roles. Custom roles can be created in the Manage Groups form. After clicking “Manage Groups” click “Create Custom Group”, name it and set the desired permissions. Please see workflow below.


Details
Access
Manage
Pipelines
Show Deactivated Users
Username
First Name
Last Name
Email
Group
Remove
Filter by Usern
Filter by First N
Filter by Last N
Filter by Email
[redacted]@gmail.com
Owners
Add/Invite User
Enter the username or email address of the user(s) to add. Separate multiple users by spaces or commas.
Add Users from List
Show List
Project Access Settings
Manage Groups
Manage Features


User Group Configuration
Display Name:
Display Name is required. It is the value that will be displayed to users on the Project Access tab.
Group Permissions
Read
Create/Edit
Delete
Project
Subjects
Imaging Sessions
CR Sessions
MR Sessions
PET Sessions
CT Sessions
PET MR Sessions
NM Sessions
Image Assessments
Protocol Validations
Manual QCs
Auto QCs
ROI Collections
Non-imaging Subject Assessors
(none)
Project-level Assessors
(none)
Cancel
Submit

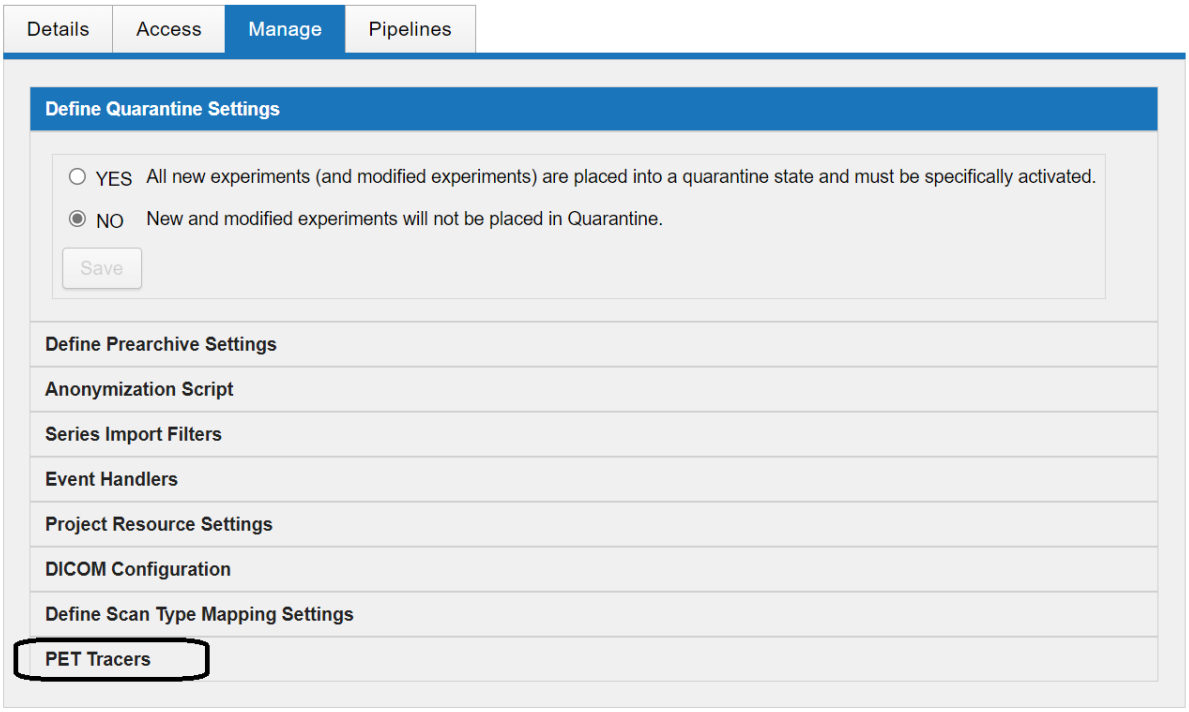
Appendix D: Using PET tracers to automate session names for visits

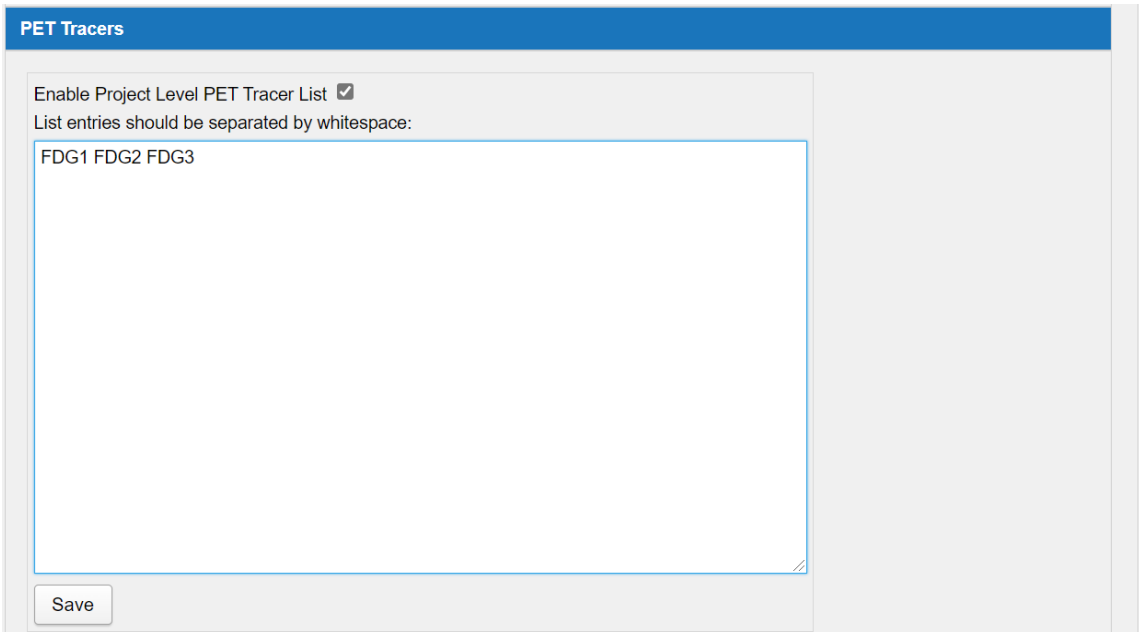
When uploading PET datasets, users will be prompted to select a tracer from the drop-down list. This tracer name will automatically generate part of the session label, improving naming consistency.

For PET images, you can set a list of tracers in your XNAT project as per the screen shots below. Just list them with a space in between. Once you've done this then when you upload a dataset that contains a pet image there will be a drop-down list for you to select a tracer. This will be then used to generate a session label.

Steps:

1. Go to your **Project Home Page**.
2. Click **Manage → PET Tracers**.
3. Enter tracer names separated by spaces (e.g., *FDG FES FLT*).
4. Click **Save**.





TESTS OF PROCEDURES

Test description	Test completed	Pass/Fail	Comments
Verify project creation process			
Verify user invitation and activation process			
Confirm access and role assignment functions correctly			
Confirm project visibility and permissions			
Confirm automation configuration by Site Administrator			
Verify secure data deletion with Site Administrator			
Verify project creation process			

DOCUMENT HISTORY

Author	Version	Effective Date	Changes
Angel Kennedy	1	22/07/2022	Initial release
Christel Norman	2	14/02/23	Reviewed and updated document, added ACQI logo,
Christel Norman	3	29/05/23	Change to the instructions on pages 7&8 regarding automation following the move of "Command Automation" to "Event Service" after the upgrade of XNAT from version 1.8.2 to version 1.8.8
Christel Norman	4	31/07/23	Deletion of Appendix C "Automations or Commands available for projects" adjustment of the text that referred to Appendix C on page 4 and renaming of Appendix D and E accordingly. This section was no longer relevant following a recent upgrade from XNAT that demoted Command automation in favour of Events services.
Christel Norman	5	26/02/2024	Updated section on managing users, added section on deleting the data at the end of the project, updated appendix D.
Grainne Cahill	6	15/04/2026	Reformatted, expanded procedures, added security, and compliance guidance
Martin Ebert	6.1	22/10/2026	Updated process for adding user