Downloading Reconstruction data instructions:

Table of Contents

[Expected Workflow: 1](#_Toc164094716)

[Notebook Decision Flowchart: 2](#_Toc164094717)

[When to use single session workflow notebook (xnat2BIDS4session.ipynb): 2](#_Toc164094718)

[When to use single session workflow notebook (multiSubjectsAndSessions2BIDS.ipynb): 3](#_Toc164094719)

[How to use the “Download Images” Tab and options: 4](#_Toc164094720)

[Option 1: Download via Desktop Client 4](#_Toc164094721)

[Option 2: ZIP download 7](#_Toc164094722)

# Expected Workflow:

This instruction set was written to help users download reconstructed mat data as well as the associated notebooks from pipelines using the XNAT API. The instruction set requires users create a custom search on pipeline run assessments data type and then they can download the associated filtered data.

# Prerequisites

## Getting filtered csv

To properly run this notebook, you will need to download a csv containing the list of the pipelines run that you want to download. This will be done within the OXI UI under the project where you want to download your data from.

1. Navigate to your project on OXI and click on Add Tab and add the “Pipeline Run assessments tab to the window.   
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2. A new tab should open and look like this, here is where we will filter our data to include exactly what we want:

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1. Left click on any of the fields and click filter, typically you will only filter the Date the pipeline was run, and by the pipeline run. You may also explore filtering by user that ran the pipeline and the scan that was used if you so choose. In this case we are going to filter by pipeline run. You should see a window show up as below:

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Note: not all fitter constraints work perfectly, it will require some trial and error.

1. Within this window click on the drop-down window and choose an option to filter by, in our case we want filter to only “Reconstruction pipelines. So we will choose the “=” and then “Reconstruction” options

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1. Once selected click the submit button. This will give us a new filtered list of Pipeline run assessments that fit our filter constraint.

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You can repeat the above steps and add even more filters, as done below by adding an additional filter for only scanUsed = scan-01

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5b. Filters can also be removed by opening the filter option under the chosen option and deleting the filter e.g. clicking on the red trashcan and click submit.

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1. Once you have your desired filtered list, click on options and download the CSV by clicking on the spreadsheet option and it should download to your computer

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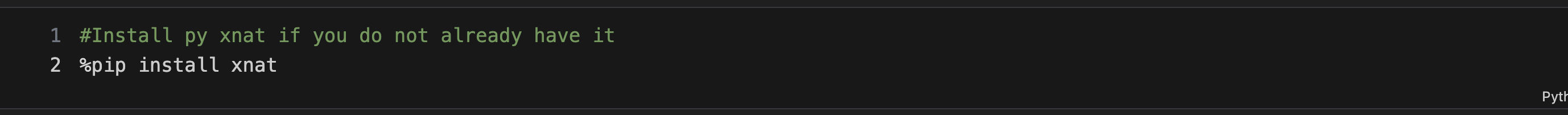
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# Downloading data

## Running notebook

1. Once you have the csv downloaded you are ready use the notebook to download your data. Follow the instructions within the notebook to install [xnat-py](https://xnat.readthedocs.io/en/latest/) if you don’t have that library and then fill out the necessary info to get your download started.
2. The following cell will install the needed python library



1. Then fill out the #TO EDIT section within the next cell with the correct info to start downloading your data.

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1. Then run the cell, bellow it you should get information regarding the download and if any errors occurred.

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1. Your downloaded files should be within a folder called “XNATDownload” located under the path you provided to download to. If you downloaded notebooks as well as mats, then they will be paired together.

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NOTE: please be patient if you are downloading a lot of files, this process is completely depended on your internet speed, can vary based on how big your files are, and is also depended on whether you are just downloading the jpg’s of the notebooks or the reconstructed mat files as well. The expectation is it can take ~ 1 min per assessment you download if you want the reconstructed mat file as well.