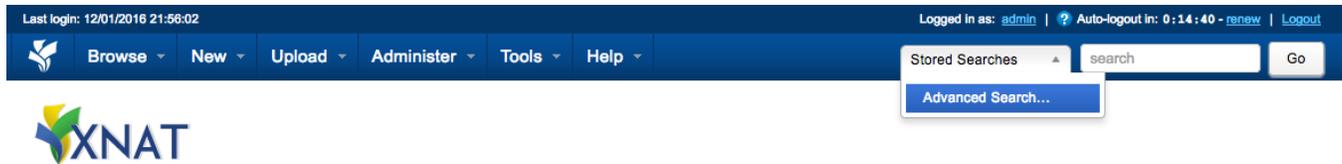


# Using the Advanced Search



The advanced search function in XNAT, accessible from nearly any page from the upper toolbar, is a powerful tool for creating custom aggregations of data, and cross-referencing one data type to another. However, it employs a complex logic and can be a difficult tool to use correctly. Unlike [simple search](#), which is geared toward driving users to a single result, the advanced search function delivers a data table. There are two major concepts at the core of how advanced search works:

- Pivot Data Type
- Database Joining

If these concepts sound familiar from the process of Browsing Data Types, the advanced search function is essentially a shortcut for that process.

## Step 1: Choose a Pivot Data Type

### Advanced Search

#### 1 Select Pivot Data-type to search

The Pivot Data-type is the root type which you are searching. There will be one row per instance of this data-type. All other included data-types will be joined to this data-type.

MR Sessions

#### 2 Select Additional Data-types

What other types of data would you like to see? Select the other types from the list below (as well as the level of fields you would like to see). The additional types will be joined to your selected pivot data-type.

MR Sessions  None  Brief  Detailed

Subjects  None  Brief  Detailed

Next

The pivot data type that you choose will set the framework for the data table that you are building. For example, if you select **MR Session** as your pivot data type, your report format will begin with a single row of data for every MR Session that you have permission to see, no more and no less.

This makes the selection of the right pivot data type very important. (See below for more.)

## Step 2: Add data types

This step will list all data types that can be joined with your pivot data type, and give you the option of starting with a "brief" or "detailed" set of columns in your table by default. (Some data types do not have a pre-defined "brief" data set, and will only allow you to select a "detailed" set of columns.

Whether you select "brief" or "detailed," you can always edit columns in the resulting data table.

Click the "Next" button to continue.

## Step 3: Pre-Filter your search

### 3 Define Search Criteria:

Define the constraints which will determine which rows show up in your search results.

MR Sessions Subjects ◀ prev next ▶

**Search by Criteria**  **Search by Exact IDs**  [Help](#)

**Subject Fields**

Subject:  Gender:  Age:

**Session Fields**

Session ID:  Operator:

Date Range:  -  Scanner:

Project:

Submit

Once you have your data types selected, you have the opportunity to filter your data table by a wide variety of criteria before the search performs. However, some users may find it just as easy to return an all-inclusive data set, and then start filtering data on the resulting data table. This is strictly a matter of preference.

## Saving Searches

**See:** [Saving a Data Table as a Stored Search](#)