Overview

Data Exporter (v 1.8.2) · https://i2b2.org/docs/data-exporter-v-1-8-2/

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- Data file creation
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- Software Changes:

Overview

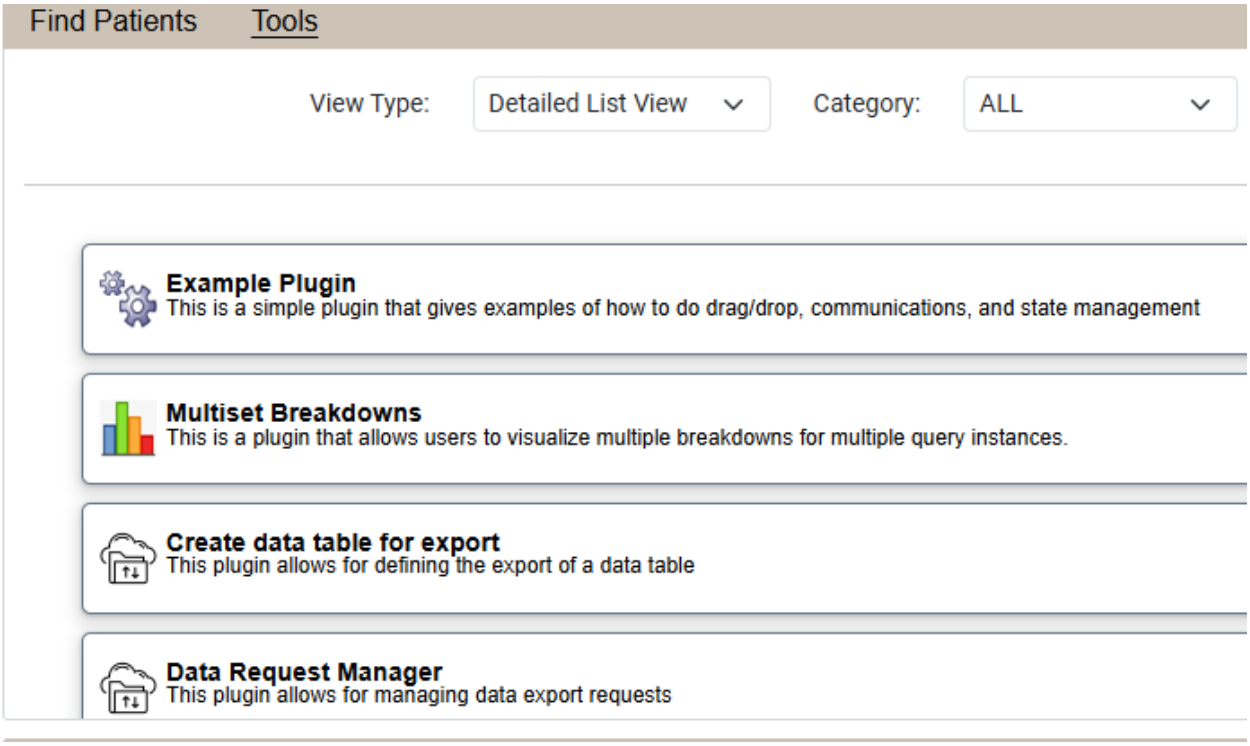
The Data Exporter functionality enables an i2b2 user to create a data table definition and request patient data for a desired cohort. First, a table of variables is designed using **create data table for export** tool. The defined data tables are then displayed under the **Data Request(s)** breakdown types that can be selected in the Run Query dialog, After the query run, the Manager user can view and manage the data requests under the **Data Request Manager** tool. i2b2 Users will be able to view their data requests status and details . An e-mail is generated for the Data Manager when the request is submitted. The Data Manager processes the request by generating the data file under the **Data Request Manager** tool. The patient data is exported as a file and stored in a specified location for retrieval, and the user is notified by e-mail.

The patient data file is generated as per the data table definition design specification

Data Export Workflow

Data Table Creation - User process

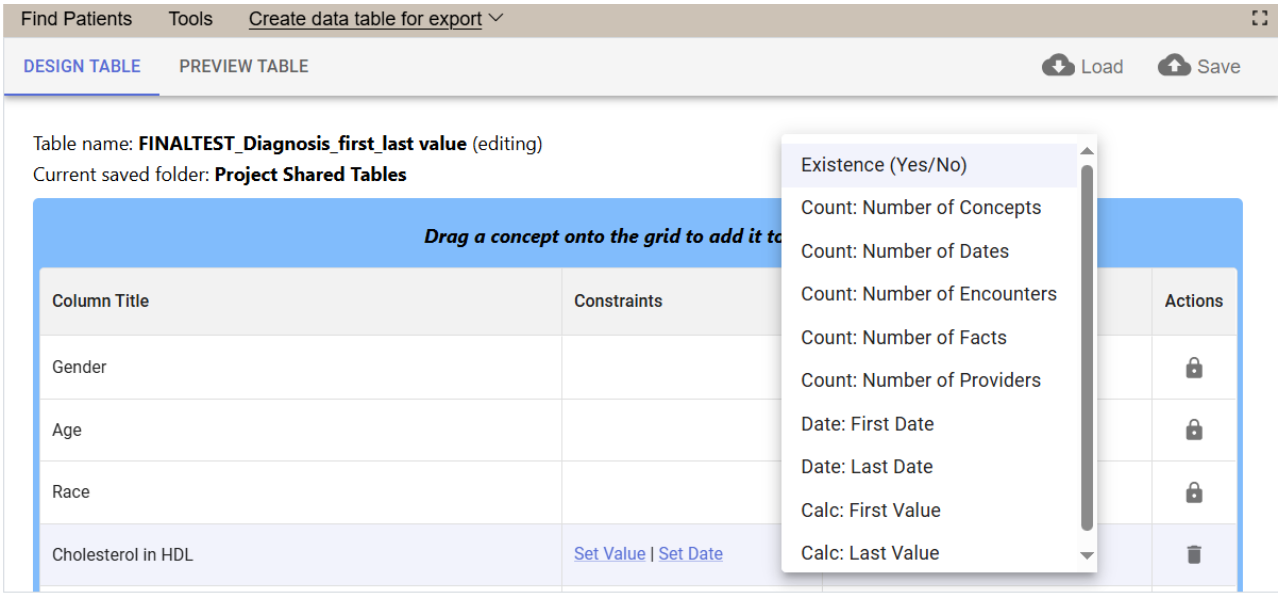
The **Create Data Table for export** feature allows User to design a table of variables of interest using the Design table feature. The table design can then be saved as a template that can be loaded and used to request data export.



Design Table

The **DESIGN TABLE** panel allows i2b2 User to create a data table definition with list of variables of interest.

1. User logs into the web client and accesses **create data table for export** tool under the **Tools** plugin
2. The **DESIGN TABLE** panel displays list of predefined variables that will be included by default in the data export file. These predefined variables are (by default) Gender, Age, Race
3. From the **Ontology Terms** tab, drag and drop additional variables of interest onto the **DESIGN TABLE** grid. These variables will be added as a list of variables included in the data export. The predefined variables are locked and cannot be unchecked since they are required for every data table. Other variables can be deleted under **Actions** column to exclude them from the data file.
4. Aggregation method for the variable can be applied by clicking on the drop down box in the **Aggregation Method** column to assign aggregate options to each variable



Aggregate Options

The availability of aggregation options depends on the type of concept it aggregates on.

Example:

- Aggregation options for a non-numeric variable such as Diagnosis are **Existence (Yes/No), Count: Number of Concepts, Count: Number of Dates, Count Number of Encounters, Count Number of Facts, Count Number of Providers, Date (First), Date (Most Recent), Most Frequent Concept (Codes)**
- Aggregation options for concepts that support numeric values such as labs include **Average, Min, Max, etc. in addition to all the functions available to normal variables**

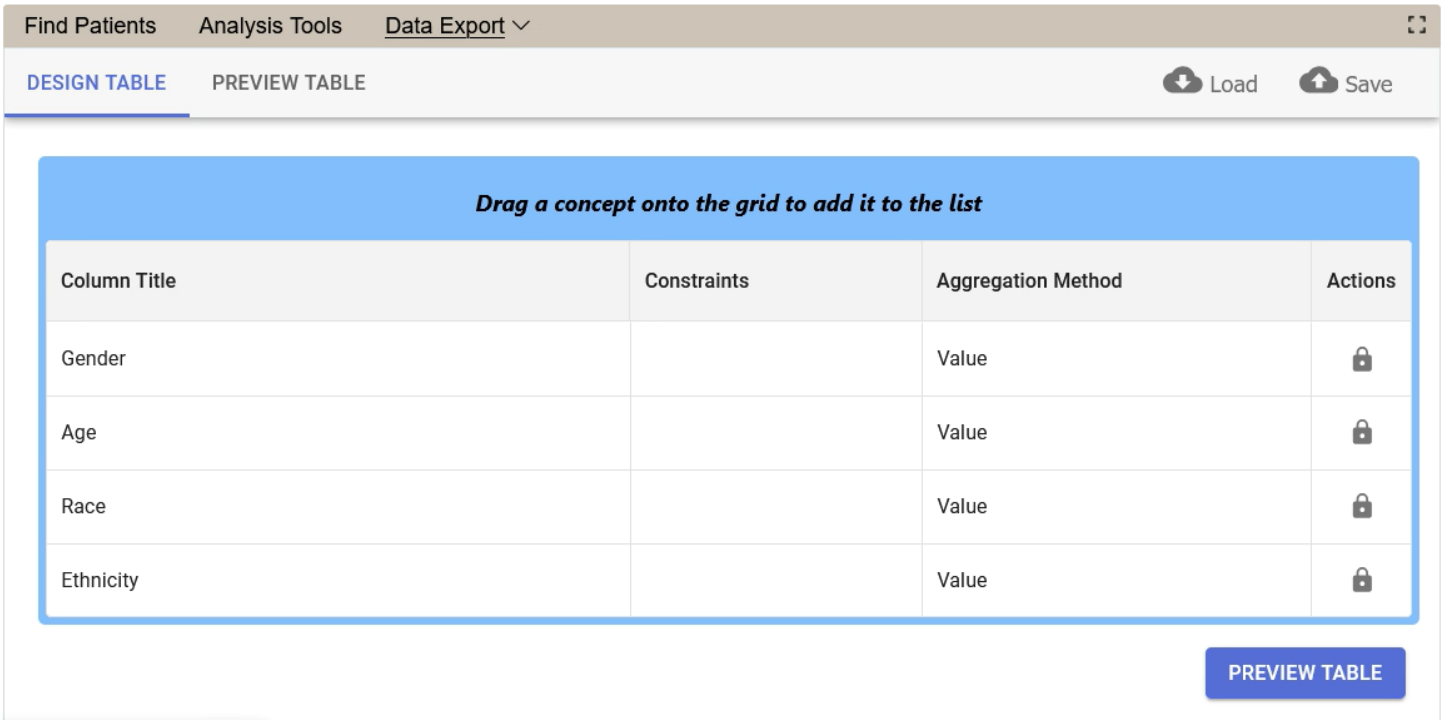
Aggregation Options	Explanation
Existence (Yes/No)	Whether the patient has an observation of this concept. This is the default option.
Count: Number of Concepts	Total number of concepts
Count: Number of Dates	Total number of dates for the participant

Count: Number of Encounters	Total number of encounters for the participant
Count: Number of Facts	Total number of observations
Count: Number of Providers	Total number of providers for the participant
Date: First Date	Date of earliest observation
Date: Last Date	Date of the most recent observation
Calc: First Value	Minimum value of all numeric values observations
Calc: Last Value	Maximum value of all numeric values observations
Calc: Number of Values	Total numbe of all numeric values observations
Calc: Average Value	Average value of all numeric values observations
Calc: Minimum Value	Lowest value of all numeric values observations
Calc: Maximum Value	Highest value of all numeric values observations
Calc: Median Value	Median value of all numeric values observations

Preview Table

Table Design can be previewed to get a preview of the data export file that will be generated.

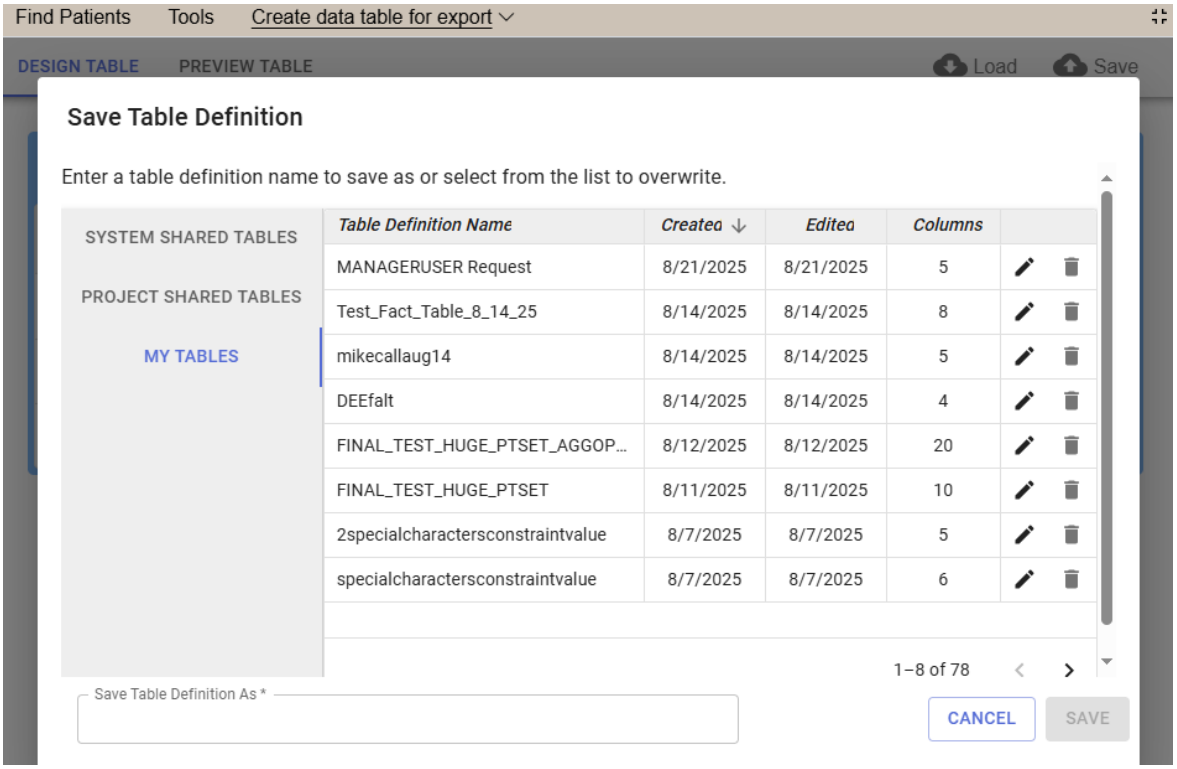
1. User clicks on **PREVIEW TABLE** to verify the variables added are displayed in the data columns in the format desired.



Design and Preview is an interactive, iterative process where User can add and remove variables as well as assign or edit Aggregate options

Save Table

1. Click on **Save**
2. The table definition can be either saved under **MY TABLES** or **PROJECT SHARED TABLES**



MY TABLES are editable and will appear as Run Query options only for the current user

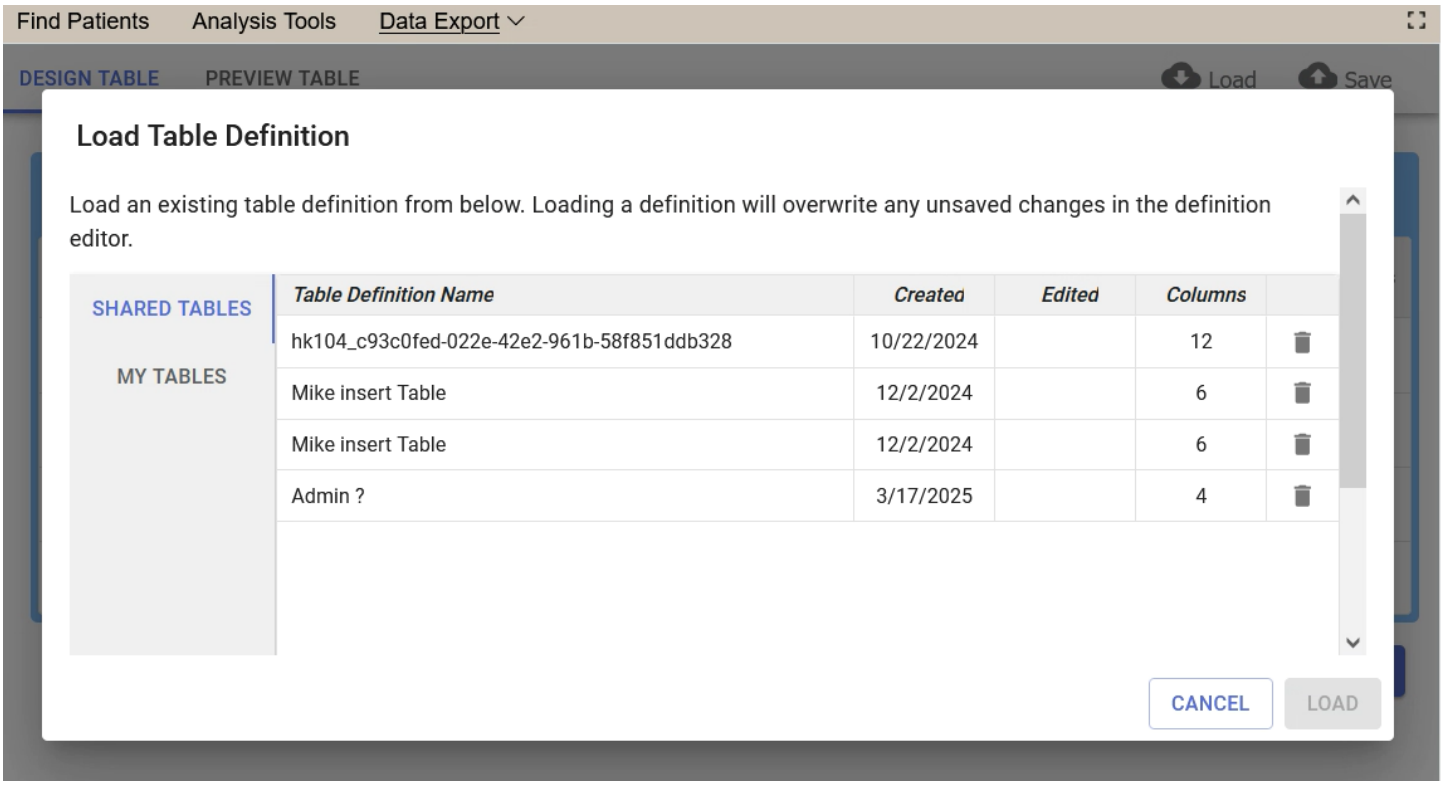
PROJECT SHARED TABLES are editable and will appear as Run Query options for any user in the current i2b2 project

SYSTEM SHARED TABLES is editable only for Admins and are templates for i2b2 users' tables

Load Table

Load table definition enables the User to Load a saved table definition

1. User clicks on **Load** menu option to display Load Table Definition with list of user saved definitions
2. Select desired table definition and clicks on LOAD button



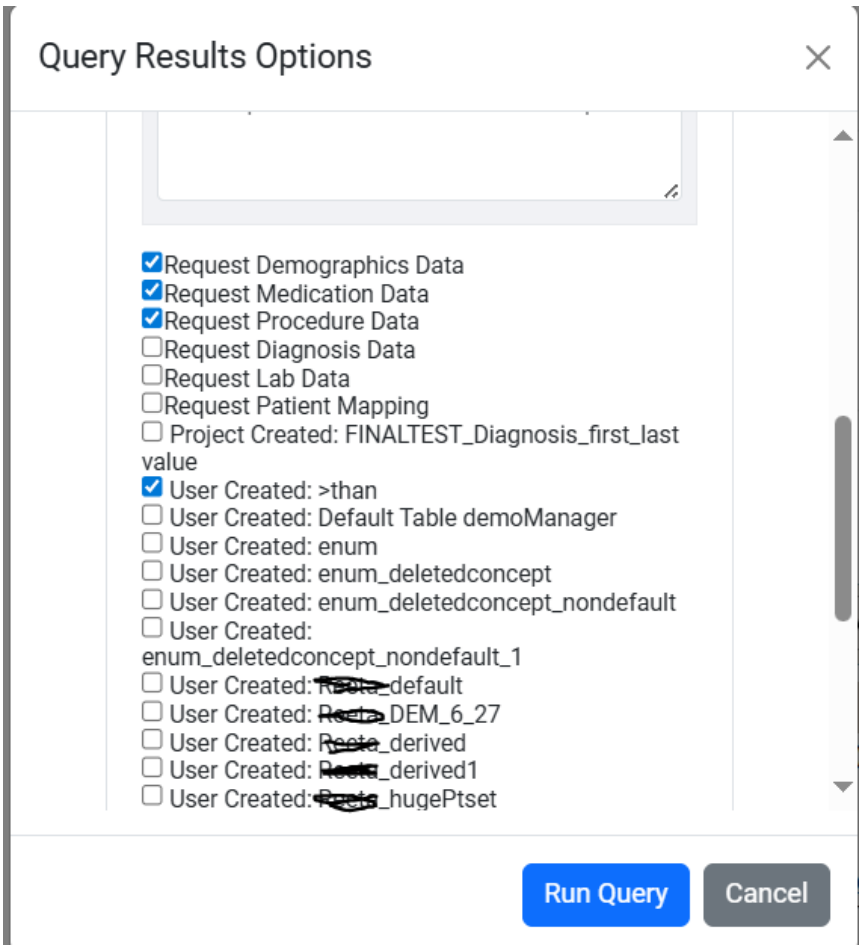
Data file definitions from **Load Table definitions** can be further refined and saved

Data Request - User process

Request 1.8.2 data exports

1. User logs into web client and creates a query.
2. In the Run Query dialog box, User created table definitions are displayed under **Data Request(s)** section
3. Select one or more data request checkboxes.
    1. 1.8.2 requests (custom tables) appear as **User Created:**

1. **1.8.1 data requests (long fact-oriented tables) appear as Request Data checkboxes.**



4. Click run query

5. An email is automatically sent to the data manager to inform them of a new data request.

6. The table definition name with the FINISHED status is displayed as one of the breakdown items in

