

i2B2 Admin Help Documentation

Version 1.8.1

Updated 05/2024

Table of Contents

1. Admin Plugin Introduction	3
1.1 Accessing Admin Module.....	3
2. Managing i2b2 Users	4
2.1 User Data.....	5
2.1.1 Add a New User	5
2.1.2 Edit a User in i2b2	7
2.1.3 Delete a User in i2b2	8
2.2 User Parameters.....	9
2.2.1 Add a User Parameter.....	9
2.2.2 Edit a User Parameter	12
2.2.3 Delete a User Parameter	14
3. Managing i2b2 Projects	15
3.1 Project Data.....	16
3.1.1 Add a New Project.....	16
3.1.2 Edit a New Project.....	17
3.1.3 Delete a New Project	18
3.2 Project Parameter	19
3.2.1 Add a Parameter to a Project	19
3.2.2 Edit a Parameter for a Project.....	21
3.2.3 Delete a Parameter for a Project	22
3.3 Project Data Source	23
3.3.1 Add a Data Source to a Project.....	23
3.3.2 Edit a Data Source for a Project	25
3.4 Project Users	27
3.4.1 Define a Project User Roles.....	29
3.4.2 Project User Parameters.....	31
4. Managing i2b2 Hive Data.....	33
4.1 Hive Data.....	33
4.1.1 Edit Hive Data	34

4.2 Hive Parameters	35
4.2.1 Add a Hive (Global) Parameter	35
4.2.2 Edit a Hive (Global) Parameter	37
4.2.2 Delete a Hive (Global) Parameter	39

1. Admin Plugin Introduction

Now that you have finished installing the i2b2 cells and clients the next step is to setup your users and projects in the i2b2 Administration Module. This chapter will contain various sections on how to save data and parameters for the users, projects and hive. There is also a section on the different Authentication Methods supported by the i2b2.

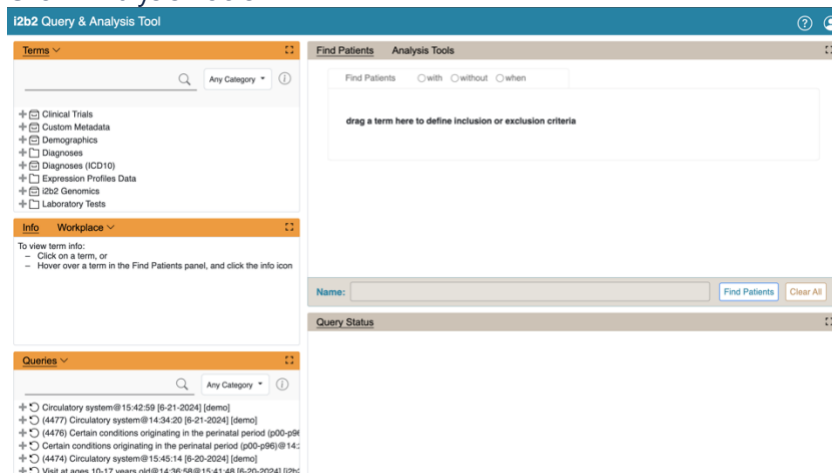
The main goals of the admin module is to help:

1. Manage users and permissions
2. Create projects and manage user access to projects
3. Define HIVE settings

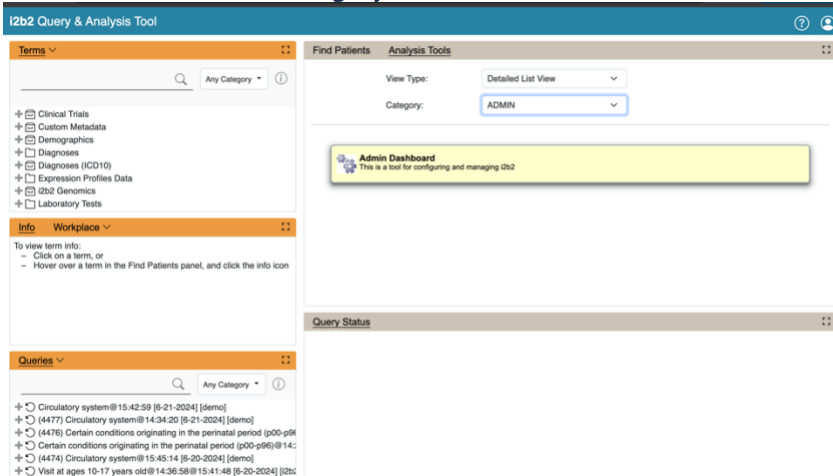
1.1 Accessing Admin Module

The i2b2 Administration Module can be accessed as a plug in.

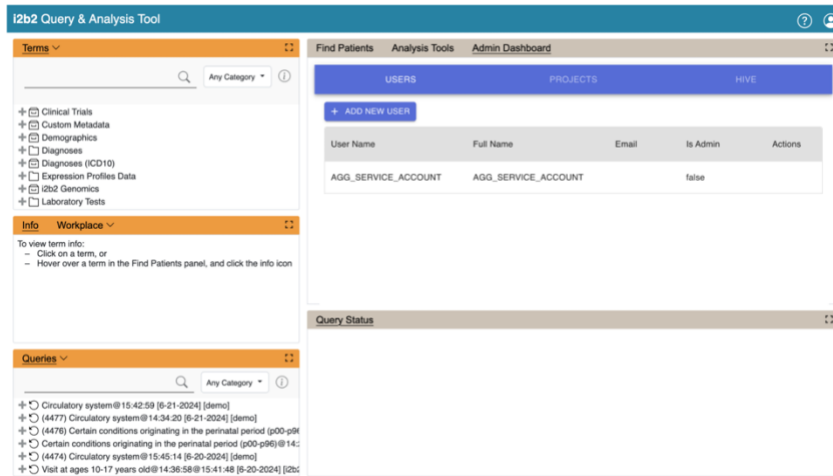
1. Click "Analysis Tools"



2. Select "Admin" as the Category



3. Click Admin Dashboard



4. This will load the i2b2 Administration Module displaying the User tab.

2. Managing i2b2 Users

Everyone who uses the i2b2 has to be setup as an i2b2 user in the i2b2 Administration Module. The management of these users is done under **Users** and the following functions for managing your users are available.

1. Add, edit, and delete user(s) and user's permission setting
2. Add, edit, and delete user parameter(s)

The steps on how to use these features are defined in one of the sections that follow

2.1 User Data

The **User Data** page captures the following general information about a user.

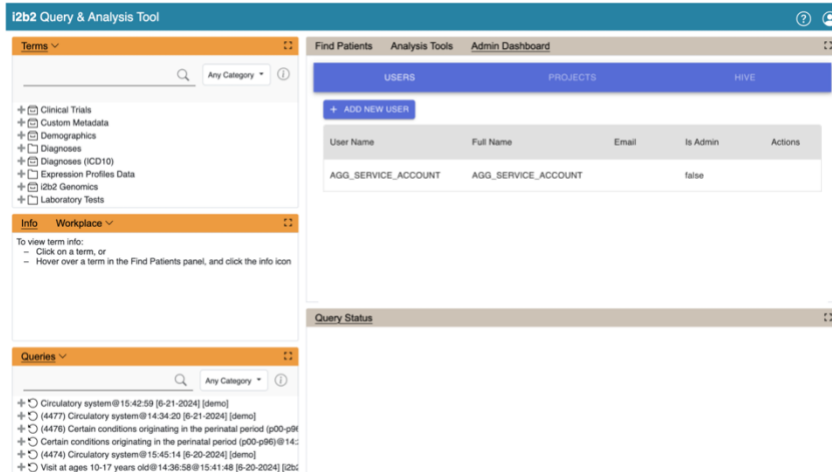
Field	Description	Required
User Name	<ul style="list-style-type: none"> • A unique id for the user. • It is used when logging into the i2b2 Web Client, Workbench and Admin. 	Yes
User Full Name	<ul style="list-style-type: none"> • The name of the user. • This name will appear in the i2b2 Web Client and Workbench when they log in. • The name will also appear in the i2b2 Admin under Manage Users in the Navigation panel. 	Yes
User Email	<ul style="list-style-type: none"> • At this time, this field is not implemented in the i2b2 core cells and clients. 	No
User Password	<ul style="list-style-type: none"> • The password the user will enter when logging into the i2b2 Web Client, Workbench and Admin. • The password will be encrypted when it is saved to the i2b2 database. 	Yes
Is Admin	<ul style="list-style-type: none"> • A Yes response means the user is an administrator. This means they can log into the i2b2 Admin and will have access to all the cells, projects and users. • A No response means the user is not an administrator. They cannot log into the i2b2 Admin. • The default setting is No 	Yes

2.1.1 Add a New User

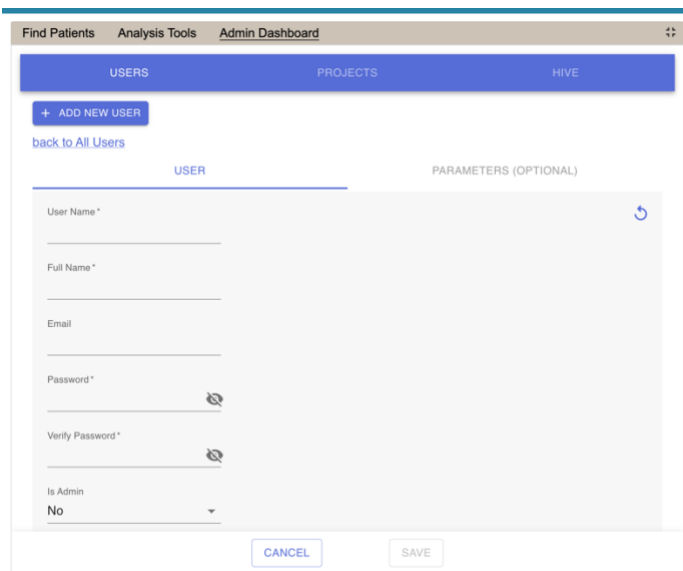
The following steps outline the process of adding a new user in the i2b2 Administration Module.

Assumption: The following steps assume you are already logged into the i2b2 Administration Module. If you do not know how to login please see the chapter titled *i2b2 Administration Module Install*.

1. In the Admin Dashboard, click on **Users**. It is the default view. The AGG_SERVICE_ACCOUNT is automatically added through the i2b2 Installation guide.



2. Click "+ADD NEW USER" button. The page to add users will display.



3. Enter the information for the user you are adding.

The screenshot shows the 'ADD NEW USER' form in the i2b2 Admin Dashboard. The form is titled 'USER' and includes the following fields:

- User Name*: JaneDoe
- Full Name*: Jane A Doe
- Email: (empty)
- Password*: (masked with dots)
- Verify Password*: (masked with dots)
- Is Admin: No (dropdown menu)

At the bottom of the form are 'CANCEL' and 'SAVE' buttons. A green notification bar at the top of the form area says 'Saved user JaneDoe'.

Warning

If **Is Admin** is set to *Yes* then the user will be able to log into i2b2 Admin Module. This means they are able to access information for ALL users, projects and cells.

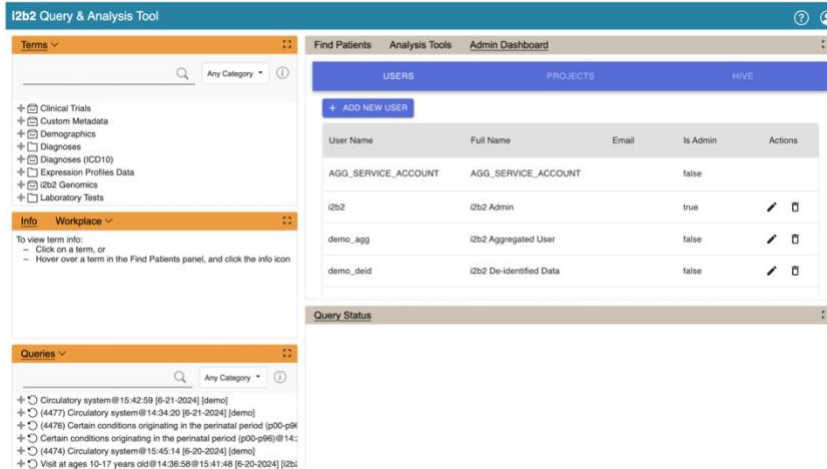
4. Click on **Save** to save the user. The user will be added to the list of users on the *Manage* page.

2.1.2 Edit a User in i2b2

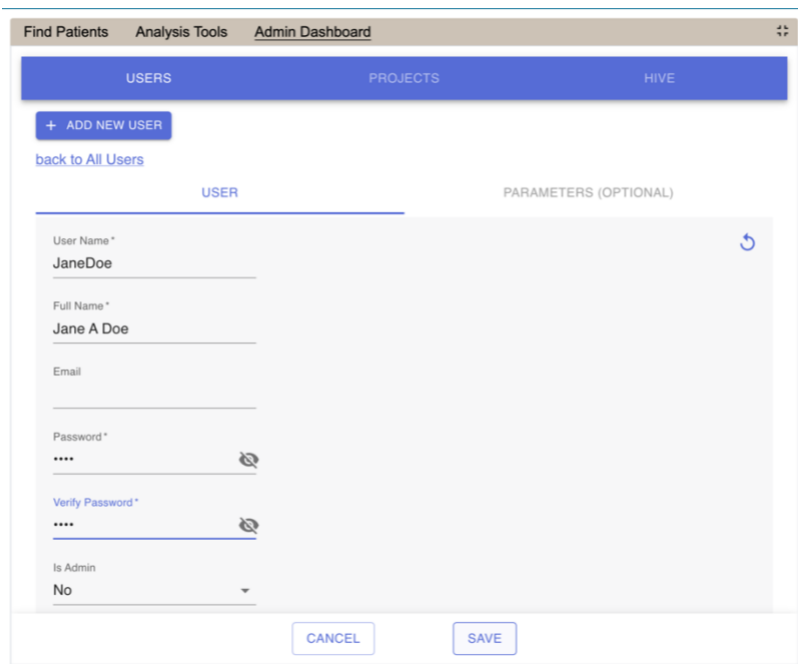
The following steps outline the process of editing a user in the i2b2 Administration Module.

Assumption: The following steps assume you are already logged into the i2b2 Administration Module. If you do not know how to login please see the chapter titled *i2b2 Administration Module Install*.

1. In the Admin Dashboard, click on **Users**. It is the default view.



2. Click the **pencil icon** in the row of the **name of the user** you want to edit.
3. The *User* page will display.



4. Make the changes to the user and click on **Save** to save the changes.

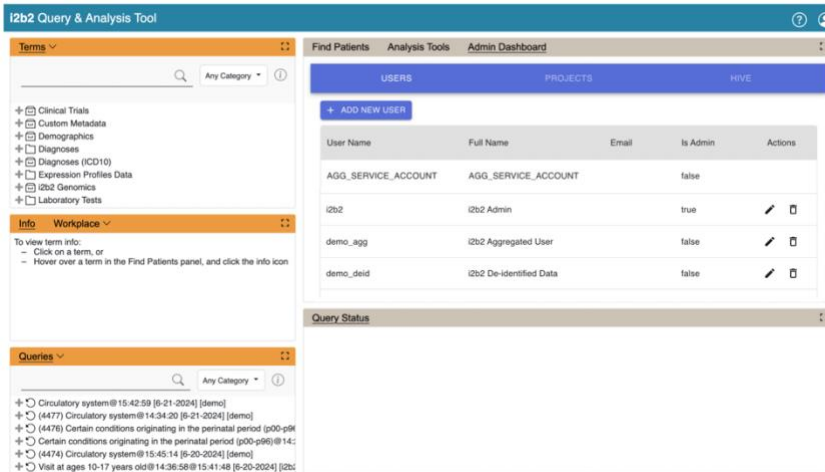
2.1.3 Delete a User in i2b2

The following steps outline the process of deleting a user in the i2b2 Administration Module.

Assumption: The following steps assume you are already logged into the i2b2 Administration Module. If you do not know how to login please see the chapter titled *i2b2 Administration Module*

Install.

1. In the Admin Dashboard, click on **Users**. It is the default view.



2. Click the **trash icon** in the row of the **name of the user** you want to edit.
3. Confirm the action. The user will be removed from the list of users on the *Users* page.

2.2 User Parameters

Parameters entered on a user are known as User Parameters and are specific to the user. The user parameter only affects the user in which it is entered on; it does not affect other users and it is not specific to any one project.

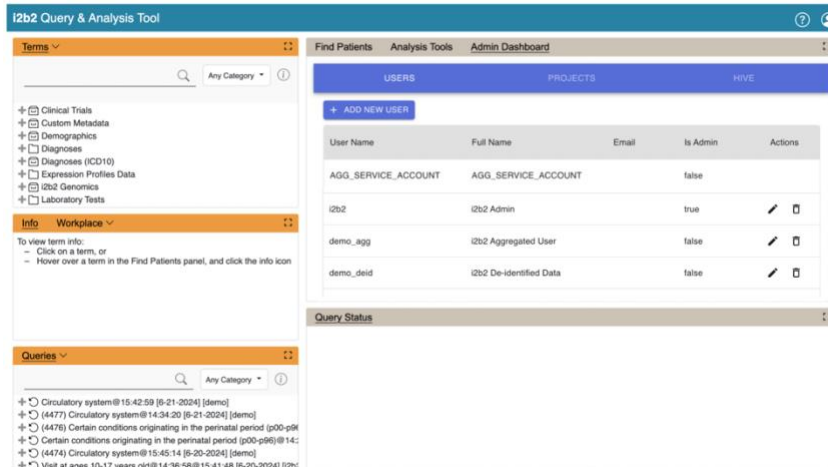
User Parameters	<ul style="list-style-type: none">• Specific to the user in which it is defined.• Does not affect other users.• Is not specific to any one project.
-----------------	--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------

2.2.1 Add a User Parameter

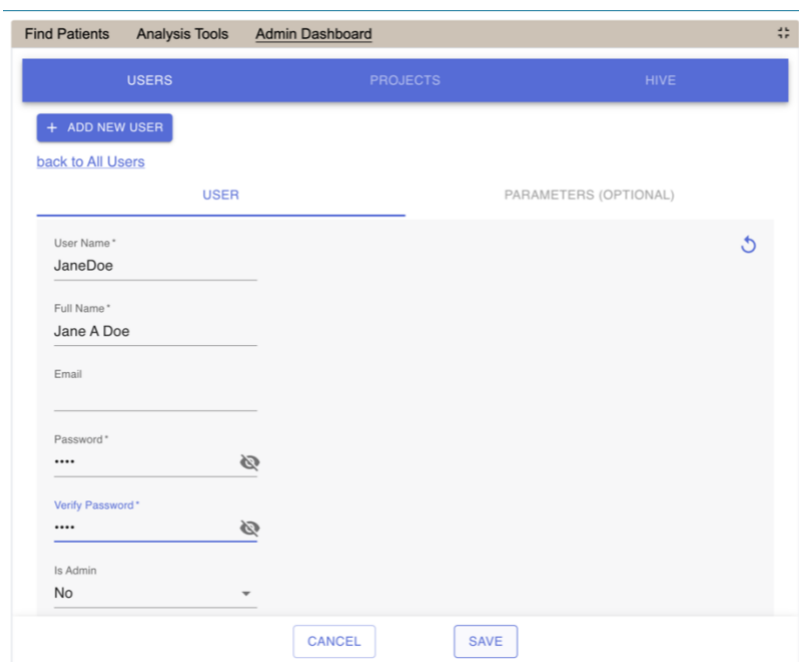
The following steps outline the process of adding a parameter to a user from within the i2b2 Administration Module.

Assumption: The following steps assume you are already logged into the i2b2 Administration Module. If you do not know how to login please see the chapter titled *i2b2 Administration Module Install*.

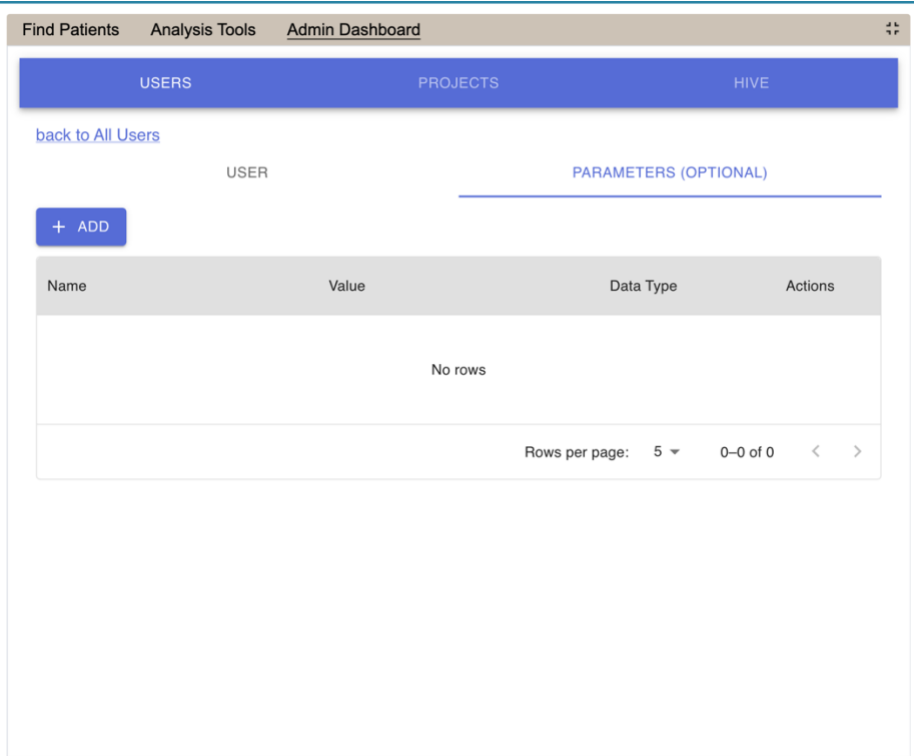
1. In the Admin Dashboard, click on **Users**. It is the default view.



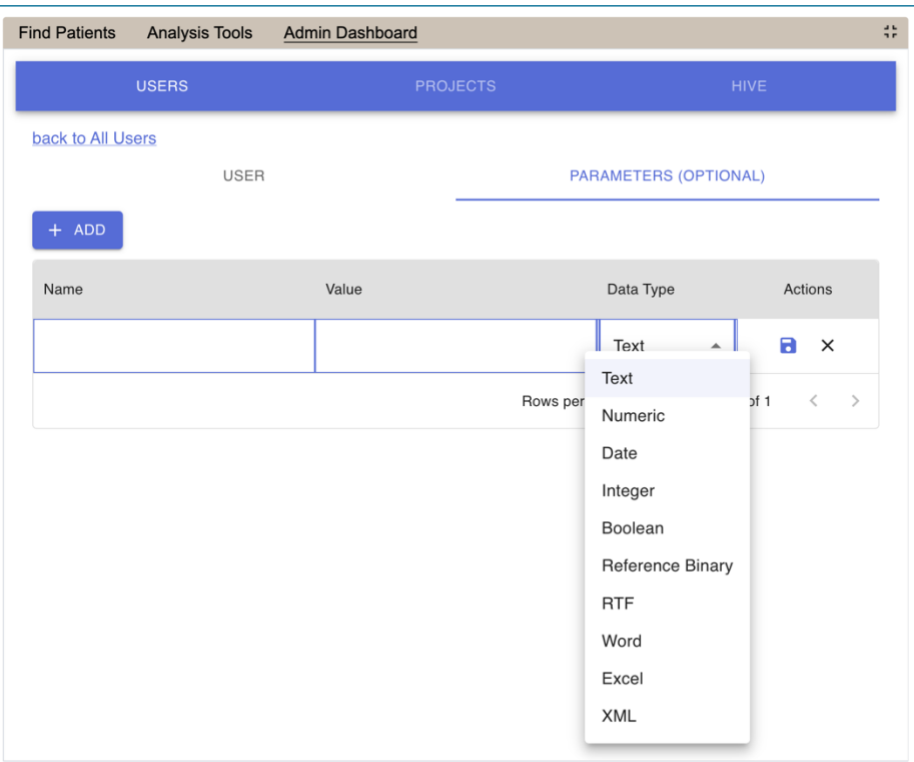
2. Click the **pencil icon** in the row of **name of the user** you want to add a parameter to.
3. Click on the **Parameters (optional)** option that displays next to the User's tab.



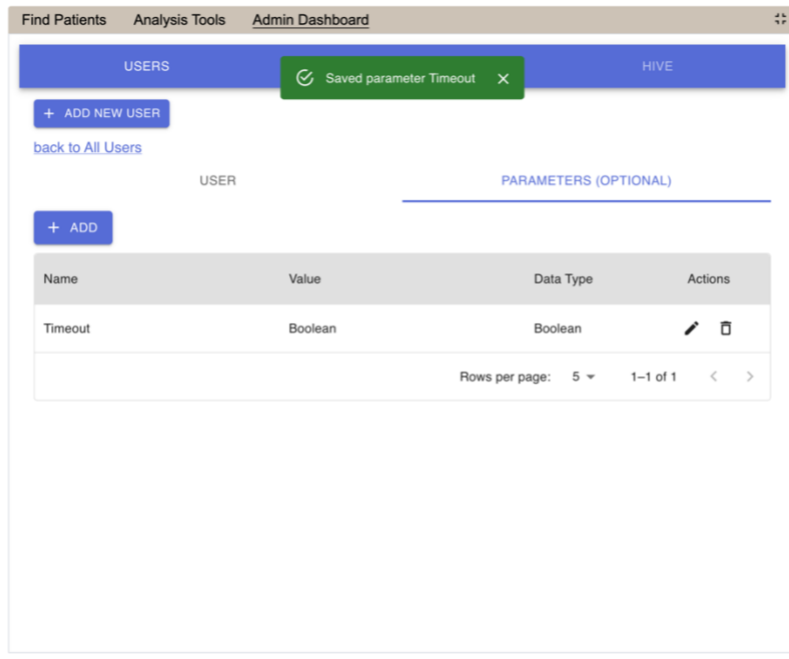
4. The **Parameters List** page will display.



5. Click on the **Add button**. A new row will display.



6. Enter the name of the parameter, the value for the parameter and the data type for the parameter.
7. Click on **Save** to save the new parameter.
8. The *Parameters List* page will display with the new parameter.

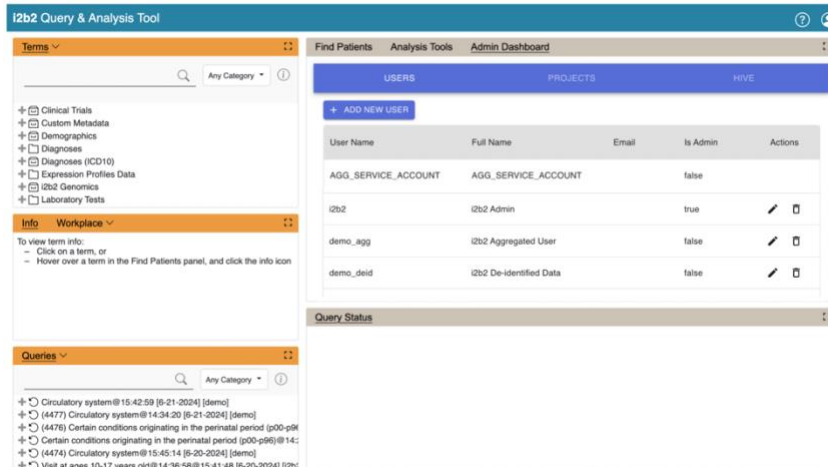


2.2.2 Edit a User Parameter

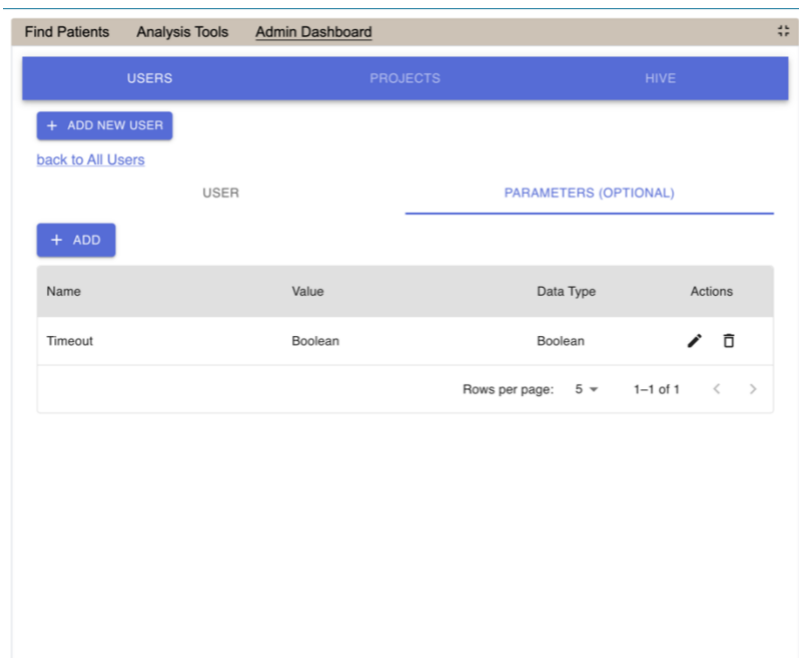
The following steps outline the process of editing a user parameter in the i2b2 Administration Module.

Assumption: The following steps assume you are already logged into the i2b2 Administration Module. If you do not know how to login please see the chapter titled *i2b2 Administration Module Install*.

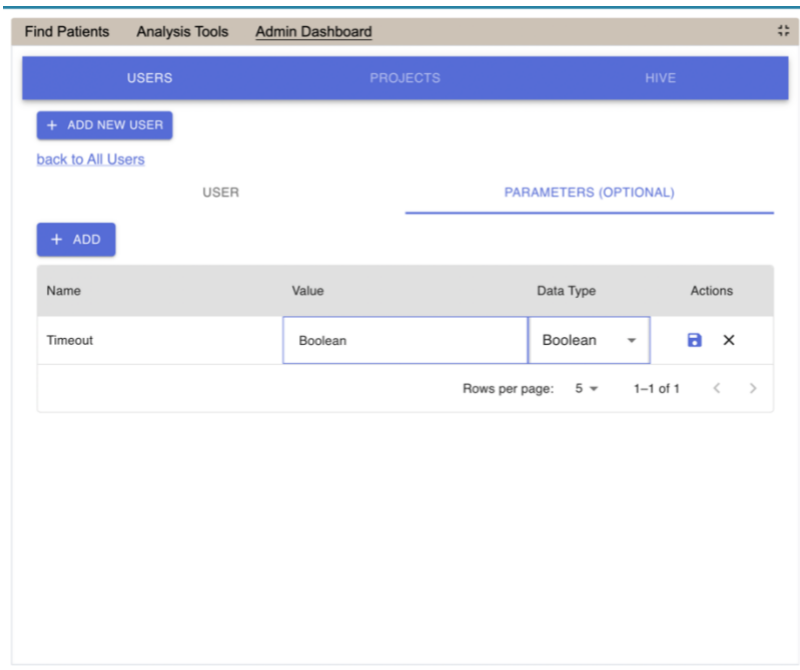
1. In the Admin Dashboard, click on **Users**. It is the default view.



2. Click the **pencil icon** in the row of the **name of the user** you want to add a parameter to.
3. Click on the **Parameters (optional)** option that displays next to the user's tab.



4. The **Parameters List** page will display. A list of parameters entered for that user will display.
5. Click the **pencil icon** in the row of the **name of the parameter** you want to edit.
6. The *Edit Parameter* fields will display for that row.



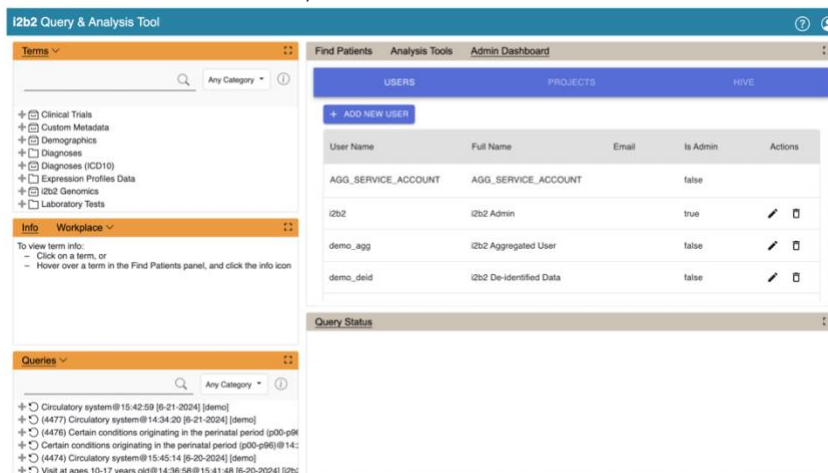
7. Make the changes to the parameter and click on the **Save** icon to save the changes.

2.2.3 Delete a User Parameter

The following steps outline the process of deleting a user parameter in the i2b2 Administration Module.

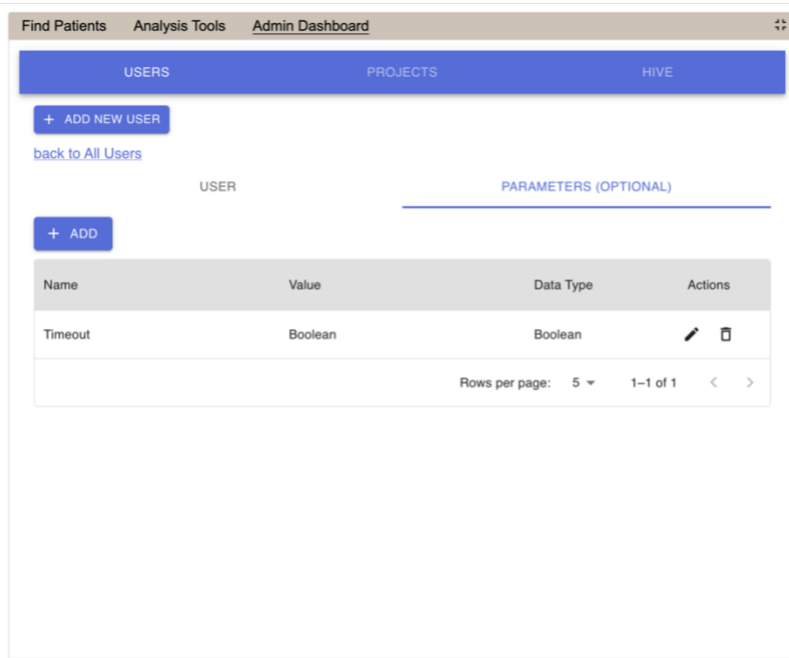
Assumption: The following steps assume you are already logged into the i2b2 Administration Module. If you do not know how to login please see the chapter titled *i2b2 Administration Module Install*.

1. In the Admin Dashboard, click on **Users**. It is the default view.

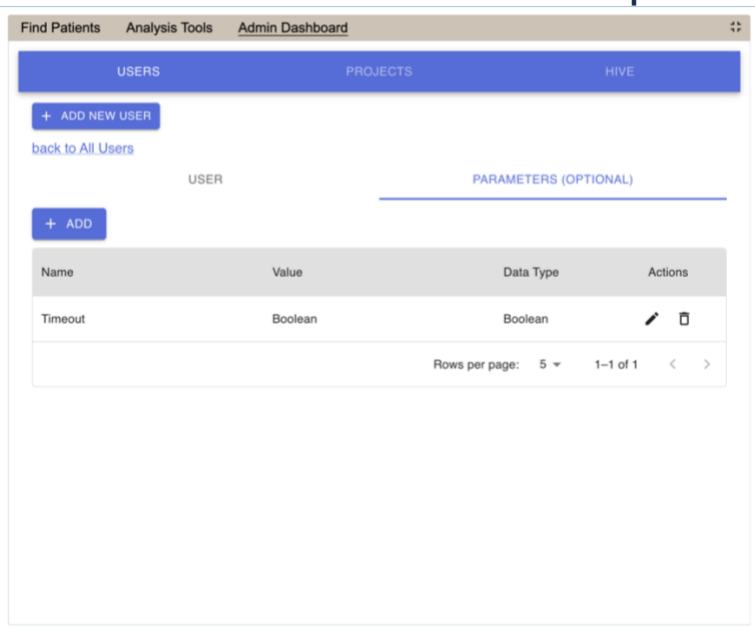


2. Click the **pencil icon** in the row of the **name of the user** you want to delete a parameter for.

3. Click on the **Parameters (optional)** option that displays next to the user's tab.



4. The **Parameters List** page will display. A list of parameters entered for that user will display.
5. Click the **trash icon** in the row of the **name of the parameter** you want to delete.



6. Confirm the action. The user will be removed from the list of parameters for that user.

3. Managing i2b2 Projects

After a user is setup in the i2b2 Administration Module they need to be given access to one or more projects before they can log into the i2b2 Web Client or Workbench. The management of your project data is done in the i2b2 Administration Module within **Manage Projects**. The following functions for managing the projects are available.

Project Data

1. Add, edit, and delete project(s)
2. Add, edit, and delete project parameter(s)
3. Add, edit data sources

Project Users

1. Add and delete project user(s)
2. Add and edit project user roles
3. Add, edit, and delete project user parameter(s)

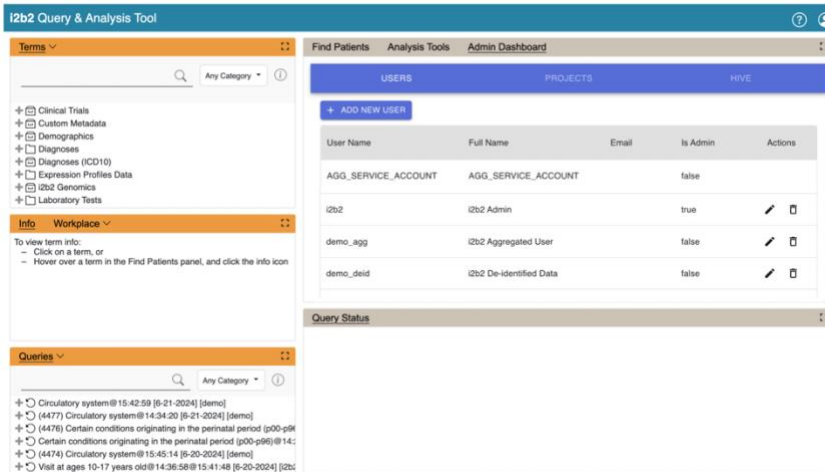
3.1 Project Data

The **Project Data** page captures the following general information about a project.

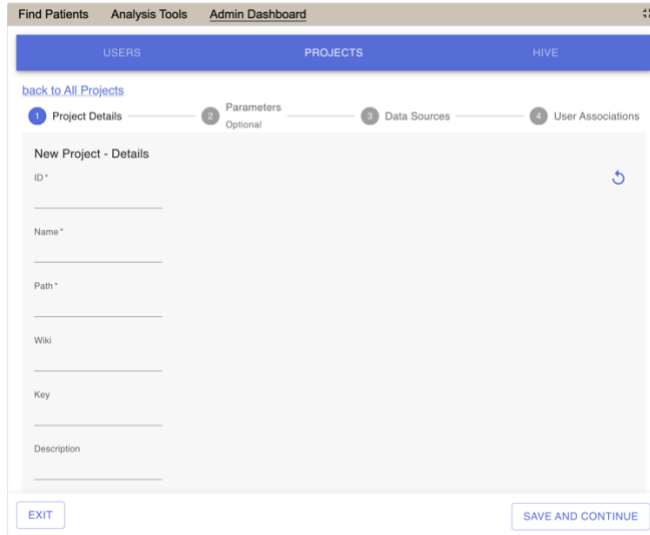
Field	Description	Required
Project ID	A unique identifier for the project.	Yes
Project Name	<ul style="list-style-type: none"> • The name of the project. • Visible to users in the i2b2 Web Client and Workbench 	Yes
Project Wiki	Currently not implemented in the i2b2 Web Client or Workbench.	No
Project Key	Enter the encryption key that is used during the encryption / decryption process.	No
Project Description	A brief description of the project. At this time it is only visible in the i2b2 Admin.	No
Project Path		No

3.1.1 Add a New Project

1. In the Admin Dashboard, click on **Projects**.



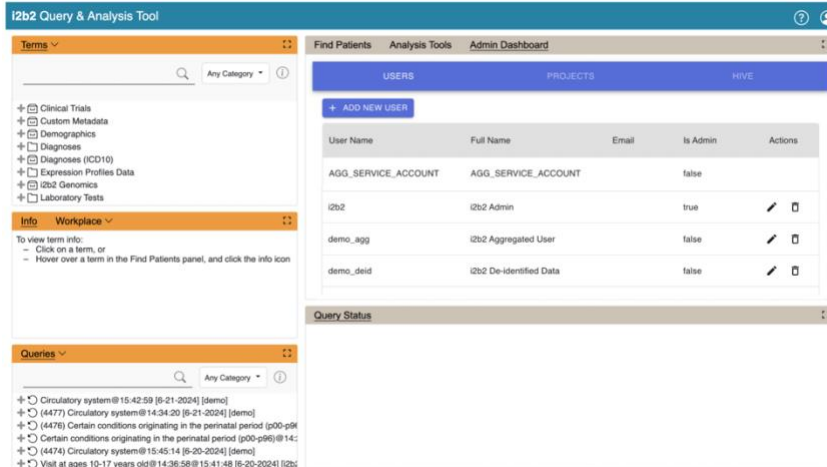
2. Click "+ADD NEW PROJECT" button. The page to add **project-details** will display.



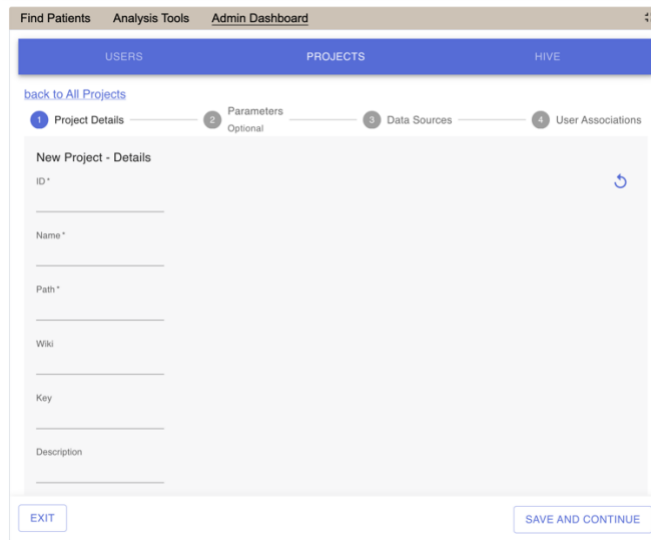
3. Click **Save and Continue**.
4. Add optional Project specific Parameters. See 3.2 Project Parameters.
5. Add Data Sources. See 3.3 Project Data Source.
6. See 3.4 to Add Users to the Project. See 3.5 Add User's Project Roles, and see 3.6 User's Project Parameters.

3.1.2 Edit a New Project

1. In the Admin Dashboard, click on **Projects**.



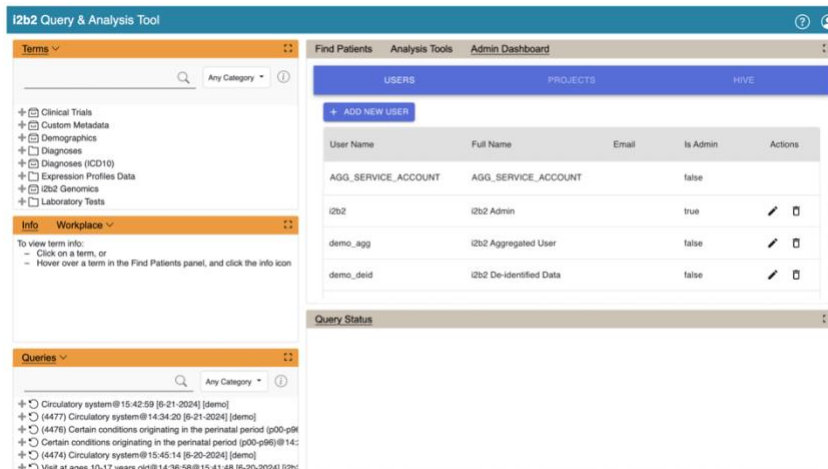
2. Click the **pencil icon** in the row of the **name of the project** you want to edit.



3. Click Save and Continue

3.1.3 Delete a New Project

1. In the Admin Dashboard, click on **Projects**.



2. Click the **trash icon** in the row of the **name of the user** you want to edit.
3. Confirm the action. The project will be removed from the list of projects on the *Project* page.

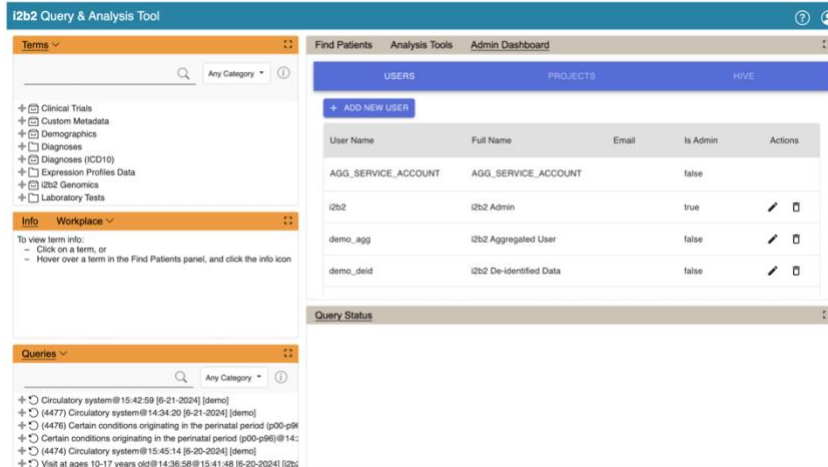
3.2 Project Parameter

Parameters entered on a project are known as **Project Parameters** and are *specific to the project*. The project parameter only affects the project in which it is entered on; it does not affect the other projects in the hive or any one user in the project.

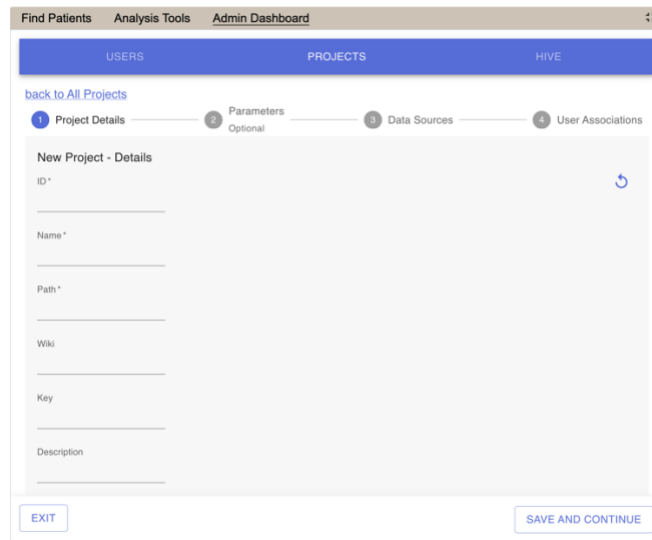
Project Parameters	<ul style="list-style-type: none"> • Specific to the project in which it is defined. • Does not affect other projects. • Will affect all users who have access to the project.
--------------------	------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------

3.2.1 Add a Parameter to a Project

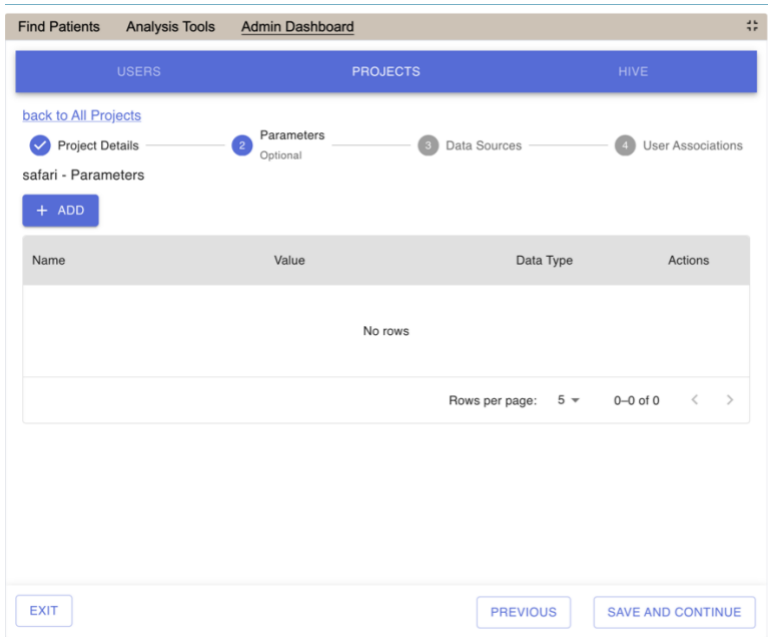
1. In the Admin Dashboard, click on **Projects**.



2. Click the **pencil icon** in the row of the **name of the project** you want to edit.



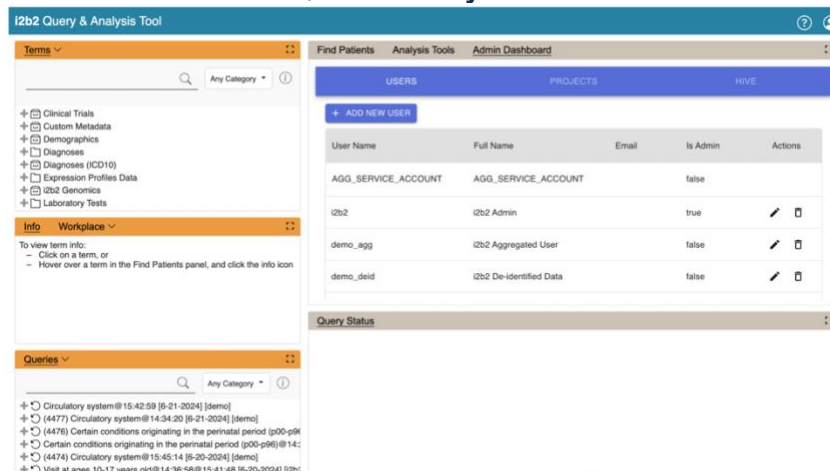
3. Click on the **Parameters (optional)** option that displays next to the project details tab.



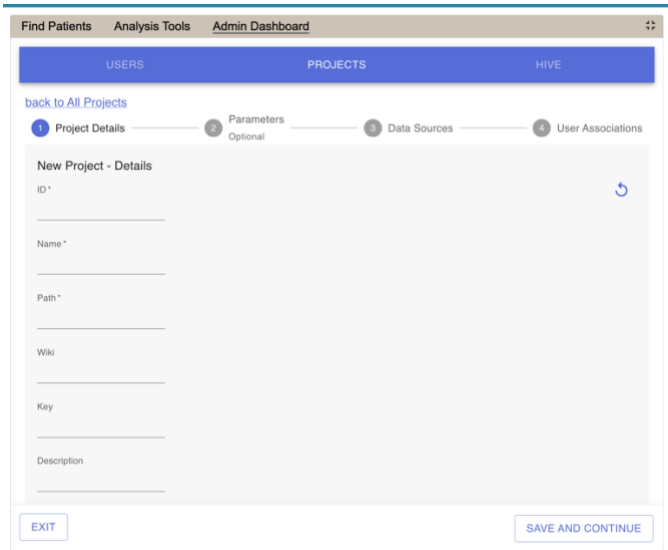
4. The **Parameters List** page for the project will display. A list of parameters entered for that project will display.
5. Click "Add" to add a new parameter.

3.2.2 Edit a Parameter for a Project

1. In the Admin Dashboard, click on **Projects**.



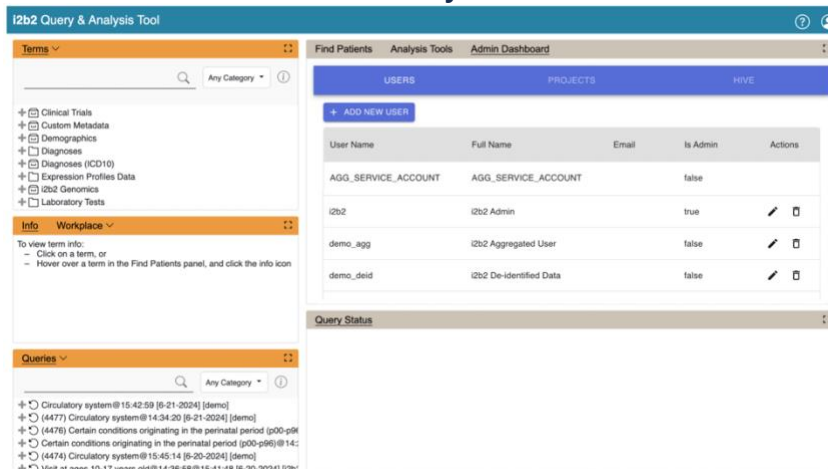
2. Click the **pencil icon** in the row of the **name of the project** you want to edit.



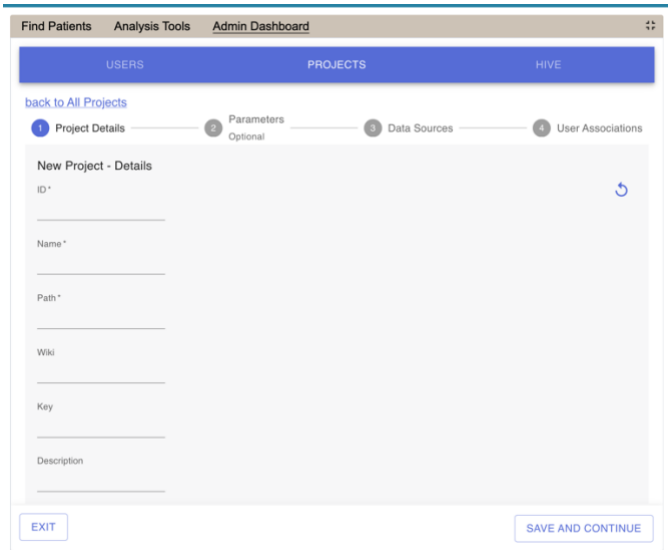
3. Click on the **Parameters (optional)** option that displays next to the project details tab.
4. The **Parameters List** page will display. A list of parameters entered for that project will display.
5. Click the **pencil icon** in the row of the **name of the parameter** you want to edit.
6. The *Edit Parameter* fields will display for that row.
7. Make the changes to the parameter and click on the **Save** icon to save the changes.

3.2.3 Delete a Parameter for a Project

- 4 In the Admin Dashboard, click on **Projects**.



- 5 Click the **pencil icon** in the row of the **name of the project** you want to edit.

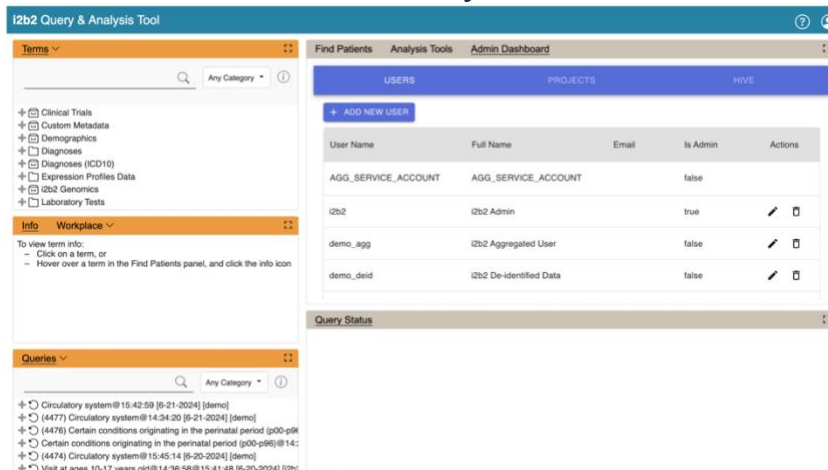


- 6 Click on the **Parameters (optional)** option that displays next to the project details tab.
- 7 The **Parameters List** page will display. A list of parameters entered for that project will display.
- 8 Click the **trash icon** in the row of the **name of the parameter** you want to remove.
- 9 Confirm the action. The parameter will be removed from the list of project parameters on the *Project* parameters page.

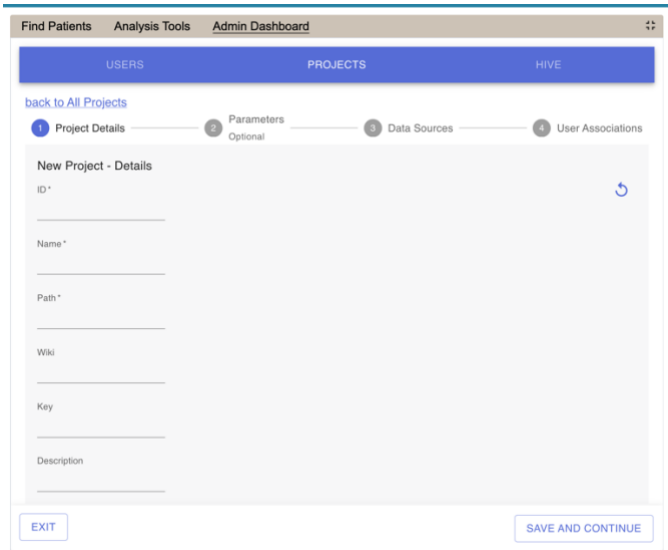
3.3 Project Data Source

3.3.1 Add a Data Source to a Project

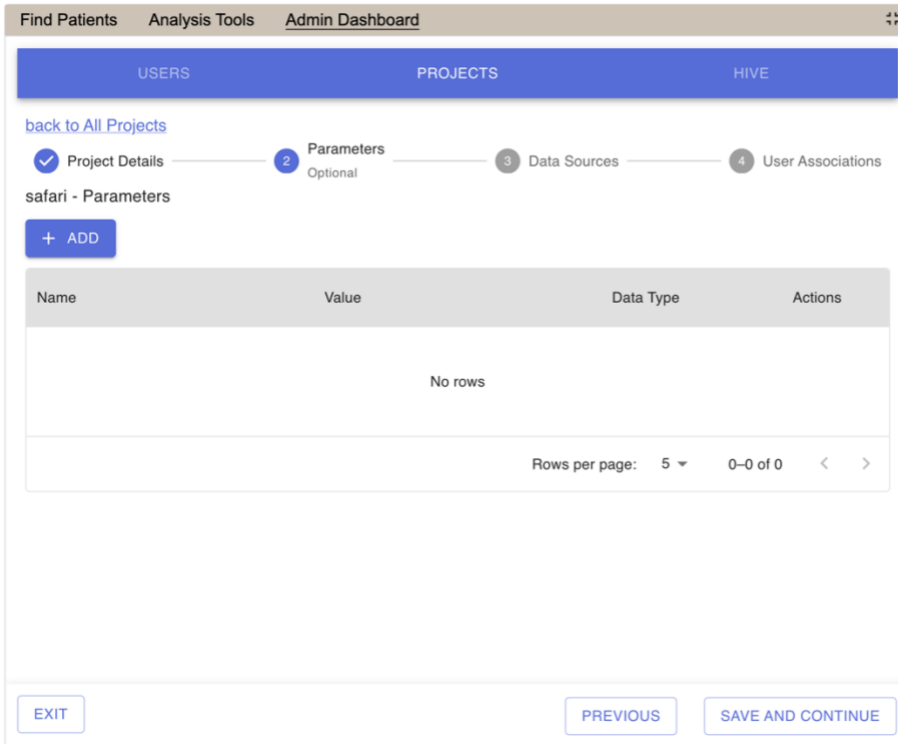
1. In the Admin Dashboard, click on **Projects**.



2. Click the **pencil icon** in the row of the **name of the project** you want to edit.



3. Click Save and Continue. The Project parameters page will display. Click Save and Continue.



4. The **Data Source** page will display.

Find Patients Analysis Tools Admin Dashboard

USERS PROJECTS HIVE

back to All Projects

Project Details Parameters Optional Data Sources User Associations

I2B2UI-814 - Data Source Details

CRC Details

Database Server *
Name *
Project Path *
/test
JNDI Data Source *
java:/
Database Schema *

ONT Details

Database Server *
Name *
Project Path *
/test
JNDI Data Source *
java:/
Database Schema *

WORK Details

Database Server *
Name *
Project Path *
/test
JNDI Data Source *
java:/
Database Schema *

EXIT PREVIOUS SAVE AND CONTINUE

5. Enter details for the CRC, ONT, and WORK data sources. Click Save and Continue.

3.3.2 Edit a Data Source for a Project

1. In the Admin Dashboard, click on **Projects**.

i2b2 Query & Analysis Tool

Find Patients Analysis Tools Admin Dashboard

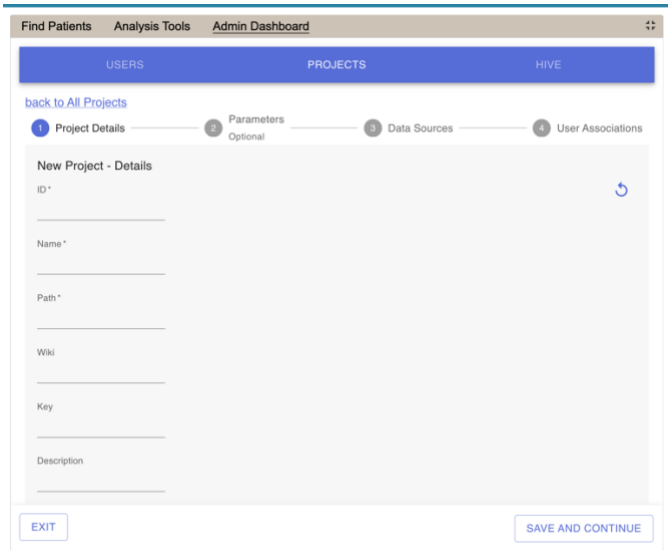
USERS PROJECTS HIVE

+ ADD NEW USER

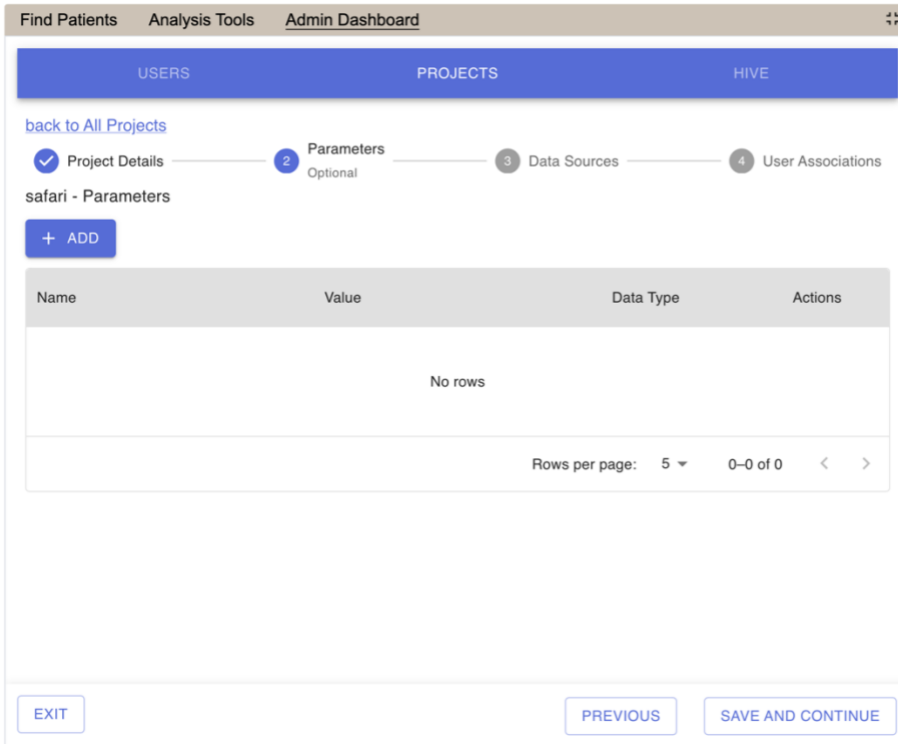
User Name	Full Name	Email	Is Admin	Actions
AGG_SERVICE_ACCOUNT	AGG_SERVICE_ACCOUNT		false	
i2b2	i2b2 Admin		true	
demo_aggr	i2b2 Aggregated User		false	
demo_deid	i2b2 De-identified Data		false	

Query Status

2. Click the **pencil icon** in the row of the **name of the project** you want to edit.



3. Click Save and Continue. The Project parameters page will display. Click Save and Continue.



4. The **Data Source** page will display.

5. Edit the details for the CRC, ONT, and WORK data sources. Click Save and Continue.

3.4 Project Users

Each user will have at least two roles per *user_id* and *project_id* combination. These two roles can be further defined as a **Data Protection role** and a **Hive Management role**.

The data protection role establishes the detail of data the user can see while the hive management role defines the level of functionality the user has in a project. The following tables summarize the roles in a hierarchical order of least to most access.

Data Protection Roles

Role	Access Description
DATA_OBFSC	<p>OBFSC = Obfuscated</p> <ul style="list-style-type: none"> The user can see aggregated results that are obfuscated (example: patient count). The user is limited on the number of times they can run the same query within a specified time period. If the user exceeds the maximum number of times then their account will be locked and only the Admin user can unlock it.

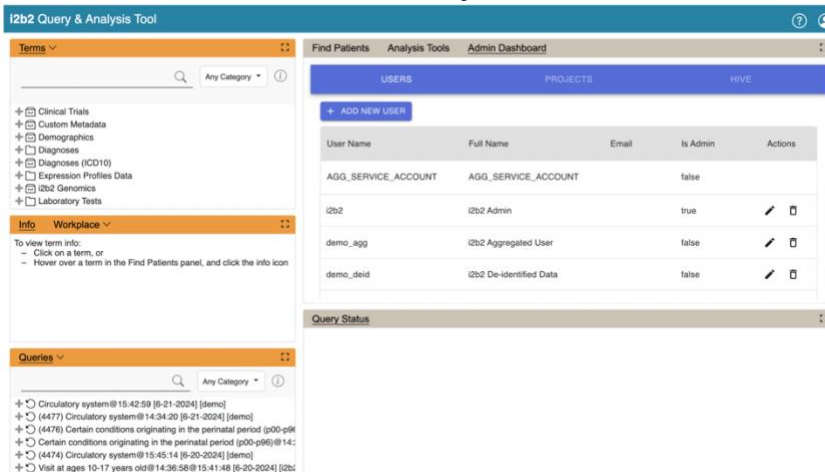
Role	Access Description
DATA_AGG	AGG = Aggregated <ul style="list-style-type: none"> • The user can see aggregated results like the patient count. • The results are not obfuscated and the user is not limited to the number of times they can run the same query.
DATA_LDS	LDS = Limited Data Set <ul style="list-style-type: none"> • The user can see all fields except for those that are encrypted. • An example of an encrypted field is the blob fields in the fact and dimension tables.
DATA_DEID	DEID = De-identified Data <ul style="list-style-type: none"> • The user can see all fields including those that are encrypted. • An example of an encrypted field is the blob fields in the fact and dimension tables.
DATA_PROT	PROT = Protected <ul style="list-style-type: none"> • The user can see all data, including the identified data that resides in the Identity Management Cell.

Hive Management Roles

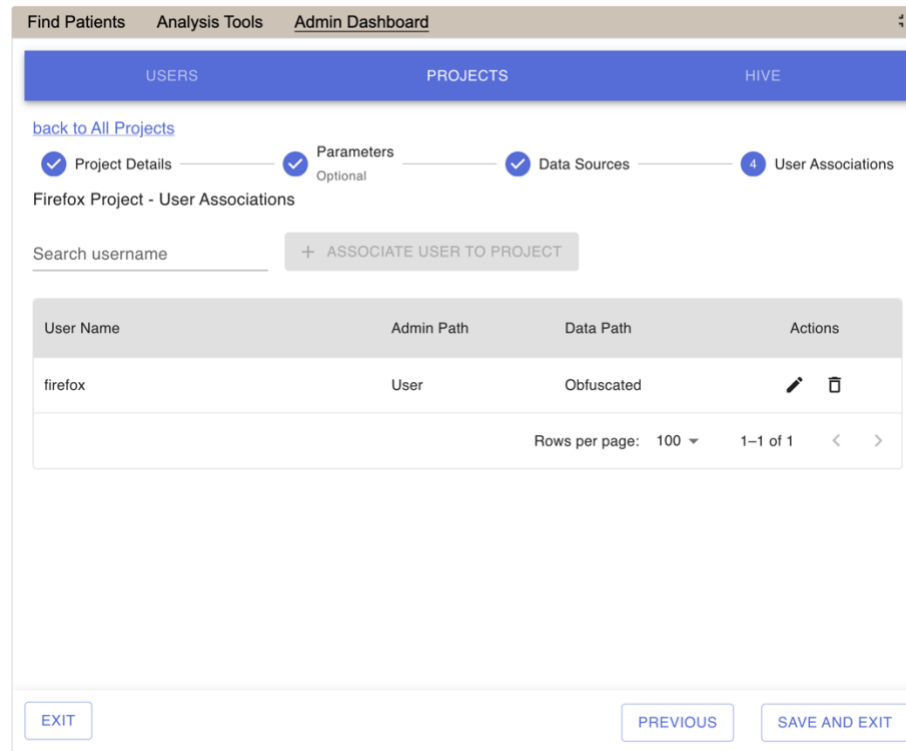
Role	Access Description
USER	Can create queries and access them if he / she is the owner of the query.
MANAGER	Can create queries as well as access queries created by different users within the project.

3.4.1 Define a Project User Roles

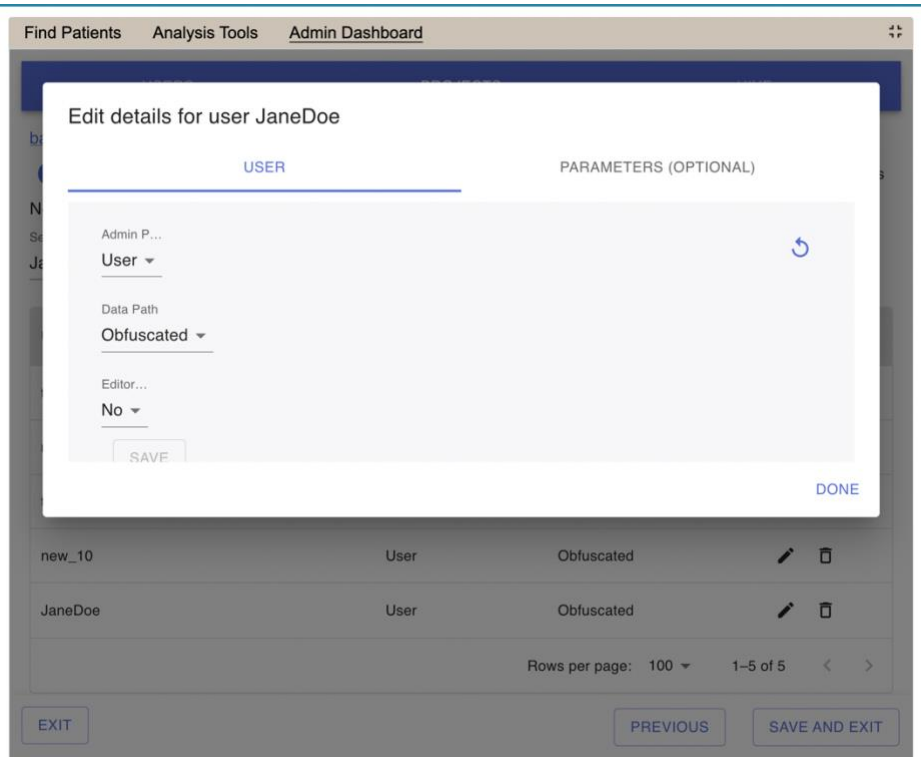
1. In the Admin Dashboard, click on **Projects**.



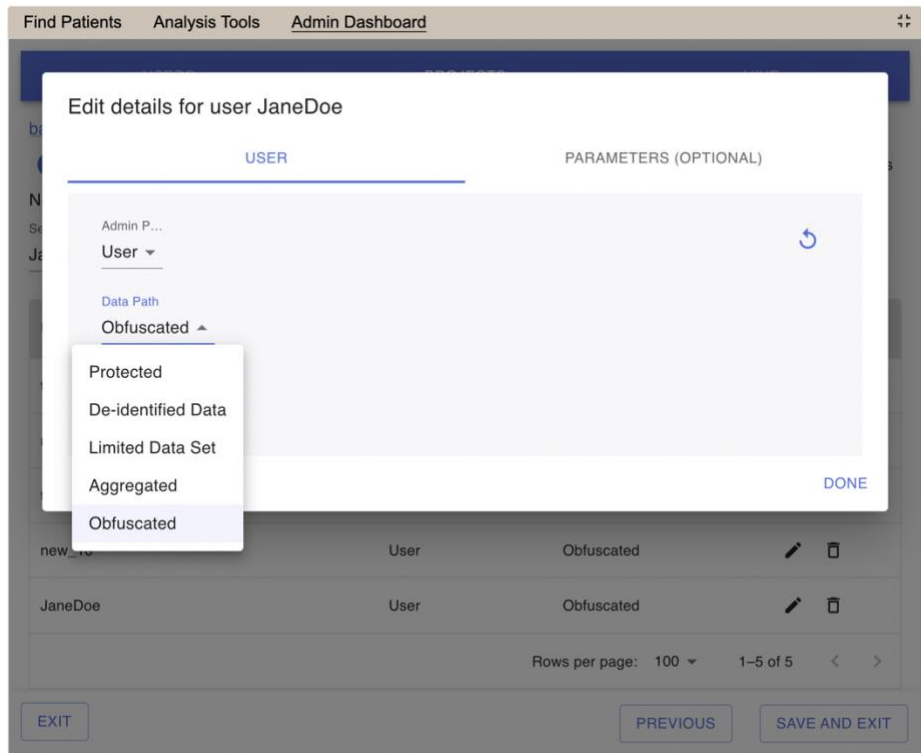
2. Click the **person icon** in the row of the **name of the project** you want to add users to.



3. On the User **Association** page for a given project, search by the username.
4. The username will be displayed on the table below.
5. Click the **pencil icon** next to a user to modify their user role for the project.



6. Select the **Admin Path**, and **Data Path**.

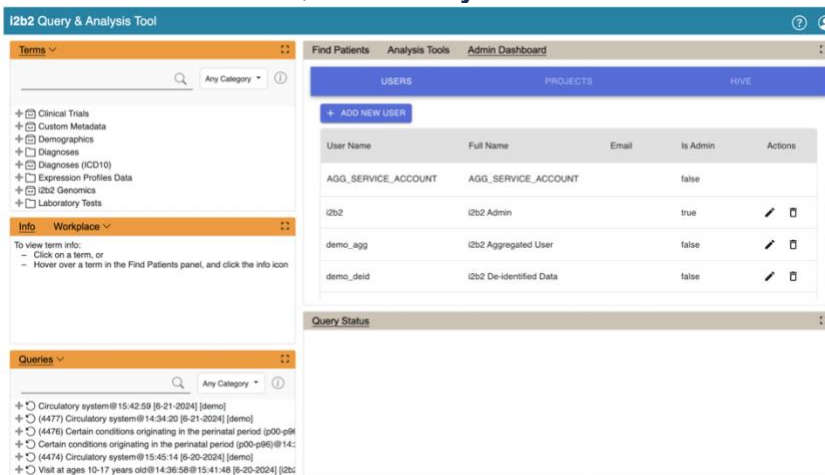


7. Click done to Save.

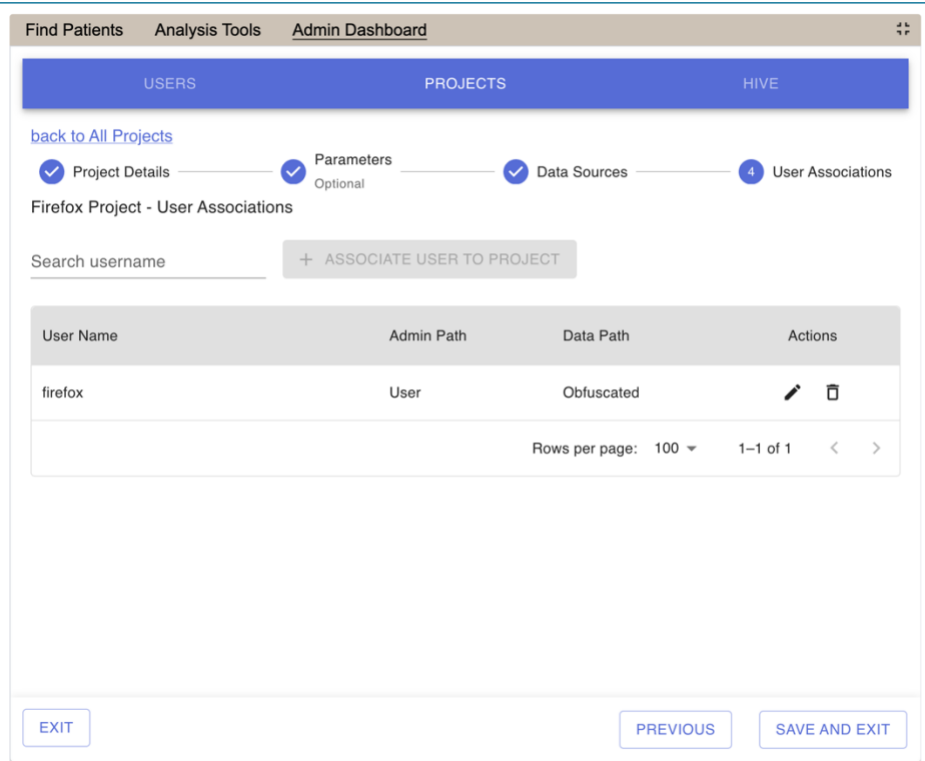
3.4.2 Project User Parameters

Project User Parameters	<ul style="list-style-type: none">• Specific to the user and the project in which it is defined.• Does not affect other users within the project.• Does not affect other projects the user has access to.
-------------------------	--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------

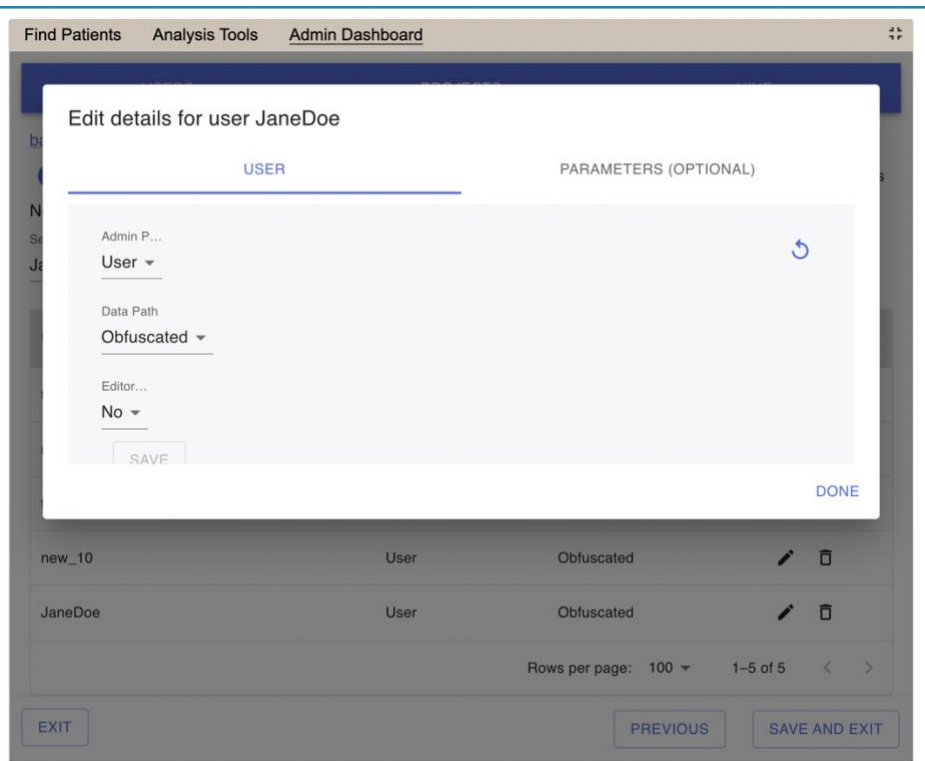
1. In the Admin Dashboard, click on **Projects**.



2. Click the **person icon** in the row of the **name of the project** you want to add project users parameters to.



3. On the User **Association** page for a given project, click the **pencil icon** next to a user to modify their user role for the project.



4. Select the Parameters tab
5. Click done to Save.

4. Managing i2b2 Hive Data

The i2b2 hive and associated web services are the infrastructure used to integrate a collection of cells. The management of your Hive data is done in the i2b2 Administration Module within **Manage Hive**. The following functions for managing the hive are available.

1. Edit hive data (*Domain ID, Help URL, Domain Name, and Environment*)
2. Add, edit, and delete hive (*global*) parameter(s)

The steps on how to use these features are defined in the sections that follow.

4.1 Hive Data

The Hive Data page captures the following general information about a hive.

Field	Description	Required
Help URL	A link to an external website that may contain additional information on using the i2b2 in your environment. This link is only used in the i2b2 Workbench and is not available from within the i2b2 Webclient. <i>(in the workbench heading there is a button labeled i2b2; clicking on this button will launch the website entered at this field.)</i>	No
Domain Name (View Only)	The name of the domain in which this hive resides. This is the same name that is entered in your Web Client and Admin config files as well as the Workbench properties file.	Yes
Environment	The type of environment this hive resides. The options are: Development Production Test	Yes

Note

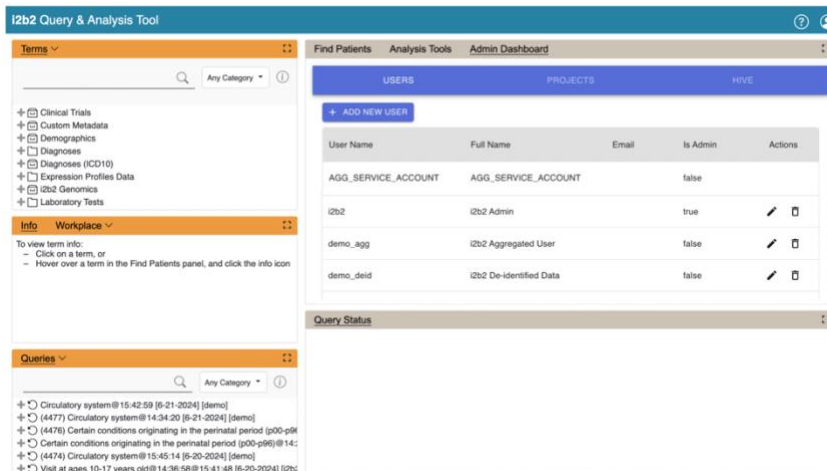
The hive is created when you are installing the i2b2 server. You cannot add or remove a hive from within i2b2 Admin; however you can edit the hive's data.

4.1.1 Edit Hive Data

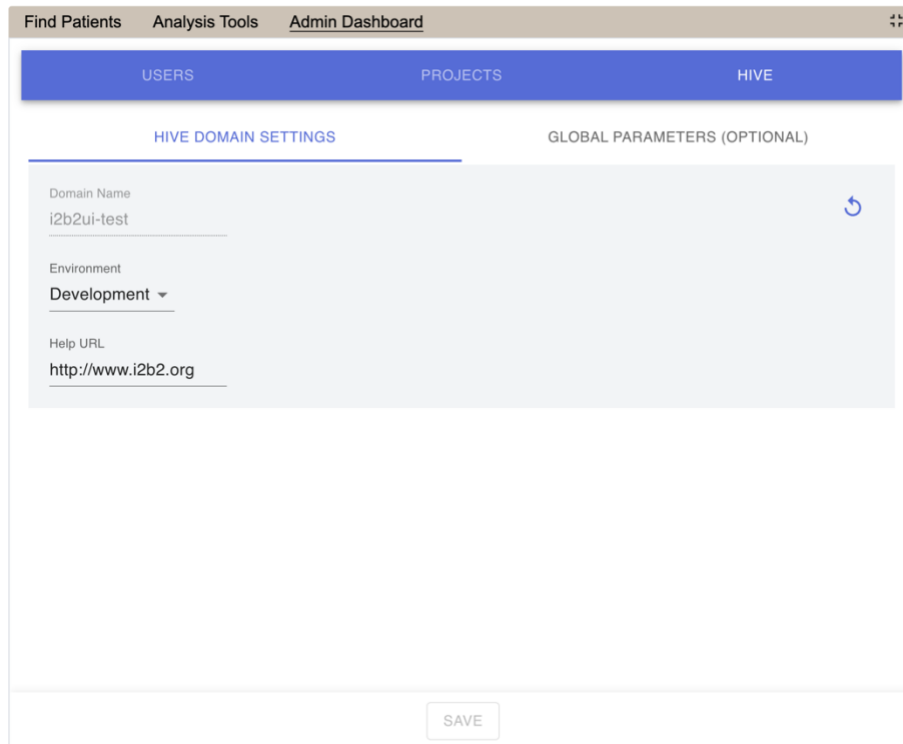
The following steps outline the process of editing the Hive Data in the i2b2 Administration Module.

Assumption: The following steps assume you are already logged into the i2b2 Administration Module. If you do not know how to login please see the chapter titled *i2b2 Administration Module Install*.

1. In the Admin Dashboard, click on **Hive**.



2. Click on **Hive Domain Settings**. This is the default view.



3. Make the changes to the Hive Data and click on **Save** to save the changes.

4.2 Hive Parameters

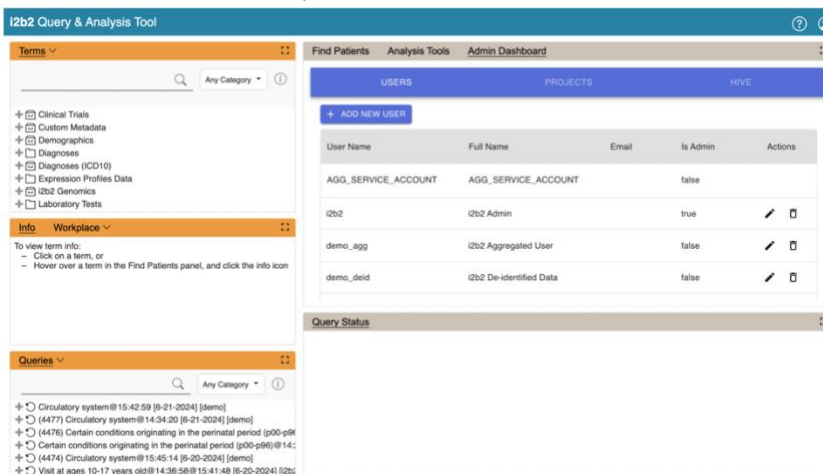
Parameters entered on a project are known as **Hive** or **Global Parameters** and are *specific to the hive (domain)*. A hive parameter is not specific to any one cell, project or user.

4.2.1 Add a Hive (Global) Parameter

The following steps outline the process of adding a parameter to the hive from within the i2b2 Administration Module.

Assumption: The following steps assume you are already logged into the i2b2 Administration Module. If you do not know how to login please see the chapter titled *i2b2 Administration Module Install*.

1. In the Admin Dashboard, click on **Hive**.



2. Click on **Global Parameters (Optional)**.

Find Patients Analysis Tools Admin Dashboard

USERS PROJECTS HIVE

HIVE DOMAIN SETTINGS GLOBAL PARAMETERS (OPTIONAL)

Domain Name
i2b2ui-test

Environment
Development

Help URL
http://www.i2b2.org

SAVE



3. The **Parameters List** page will display.

Find Patients Analysis Tools Admin Dashboard

USERS PROJECTS HIVE

HIVE DOMAIN SETTINGS GLOBAL PARAMETERS (OPTIONAL)

+ ADD

Name	Value	Data Type	Actions
DEFAULT_PLUGIN_CATEGORY	DEMOGRAPHICS	Text	 

Rows per page: 5 1-1 of 1

4. Click on **Add New Parameter**. The *Enter Parameter* page will display.

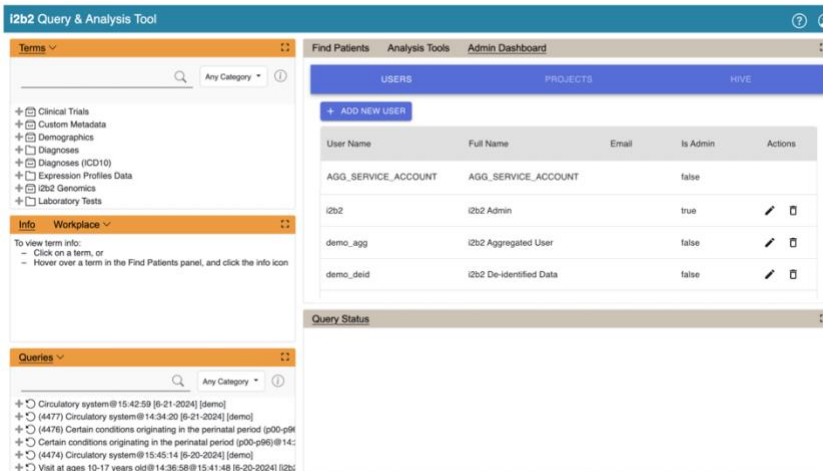
5. Enter the name of the parameter, the value for the parameter and the data type for the parameter.
6. Click on **Save** to save the new parameter.
7. The *Parameters List* page will display with the new parameter.

4.2.2 Edit a Hive (Global) Parameter

The following steps outline the process of editing a hive parameter in the i2b2 Administration Module.

Assumption: The following steps assume you are already logged into the i2b2 Administration Module. If you do not know how to login please see the chapter titled *i2b2 Administration Module Install*.

1. In the Admin Dashboard, click on **Hive**.



2. Click on **Global Parameters (Optional)**.

Find Patients Analysis Tools Admin Dashboard

USERS PROJECTS HIVE

HIVE DOMAIN SETTINGS GLOBAL PARAMETERS (OPTIONAL)

Domain Name
i2b2ui-test

Environment
Development ▾

Help URL
http://www.i2b2.org

SAVE



3. The **Parameters List** page will display.

Find Patients Analysis Tools Admin Dashboard

USERS PROJECTS HIVE

HIVE DOMAIN SETTINGS GLOBAL PARAMETERS (OPTIONAL)

+ ADD

Name	Value	Data Type	Actions
DEFAULT_PLUGIN_CATEGORY	DEMOGRAPHICS	Text	 

Rows per page: 5 ▾ 1-1 of 1 < >

4. Click the **pencil icon** in the row of the **name of the parameter** you want to edit.

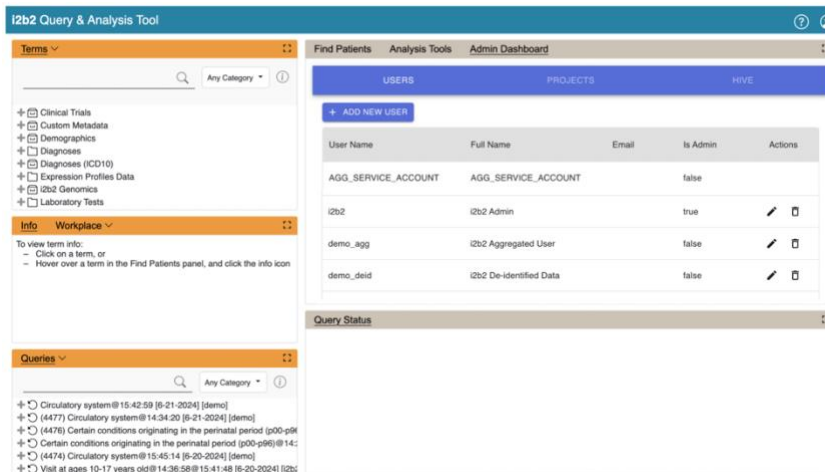
- The *Edit Parameter* fields will display for that row.
- Make the changes to the parameter and click on the **Save** icon to save the changes.

4.2.2 Delete a Hive (Global) Parameter

The following steps outline the process of deleting a hive parameter in the i2b2 Administration Module.

Assumption: The following steps assume you are already logged into the i2b2 Administration Module. If you do not know how to login please see the chapter titled *i2b2 Administration Module Install*.

- In the Admin Dashboard, click on **Hive**.



- Click on **Global Parameters (Optional)**.

Find Patients Analysis Tools Admin Dashboard

USERS PROJECTS HIVE

HIVE DOMAIN SETTINGS GLOBAL PARAMETERS (OPTIONAL)

Domain Name
i2b2ui-test

Environment
Development

Help URL
http://www.i2b2.org

SAVE



3. The **Parameters List** page will display.

Find Patients Analysis Tools Admin Dashboard

USERS PROJECTS HIVE

HIVE DOMAIN SETTINGS GLOBAL PARAMETERS (OPTIONAL)

+ ADD

Name	Value	Data Type	Actions
DEFAULT_PLUGIN_CATEGORY	DEMOGRAPHICS	Text	 

Rows per page: 5 1-1 of 1

4. Click the **trash can icon** in the row of the **name of the parameter** you want to remove.

5. Confirm the action. The parameter will be removed from the list of hive (global) parameters on the page.