

DataMart Administrator Guide The HMORN CERT DEcIDE Center Distributed Query Tool

Version 2.1.10

November 2010



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1 Introduction

This guide describes how to install and manage a DataMart within the HMORN CERT DEcIDE Center Distributed Query Tool. This includes set up and configuration of the physical environment (consisting of Internet connectivity/desktop computer requirements, and system software), and a set of step-by-step instructions for installing and performing initial administrative setup of a DataMart Client. The guide also describes the tasks and activities required to manage the DataMart settings in the Portal.

System Overview

The Distributed Query Tool system is comprised of two separate applications, the web-based **Portal** and the **DataMart Client**. There is exactly one Portal in the network and many DataMarts. The Portal is the starting point for all information requests and controls all system communications, security, and governance policies. Data Partners receive queries, process them, and securely return them to the Portal via their local DataMart Client. Each Data Partner will have at least one DataMart; multiple DataMarts per Data Partner are possible. Each DataMart can contain different types of data and DataMarts can have different query processing settings. All query requests and communications within the network are securely routed from the Portal to the DataMarts and then back to the Portal.

Note: The term "DataMart" is used in an information technology context referring to the place where the data are held for querying. Use of this term does not imply that data partner information is being sold or being made broadly available; Data Partners maintain control of all their data and all uses.

The DataMart Client Application

The DataMart Client application allows the DataMart Administrator to view queries distributed to the DataMart, execute queries locally, review the results, and upload the results to the portal. The DataMart Client is a .NET/C# Windows desktop application developed by LPP that is installed locally on an Administrator's desktop. All communications between the DataMart Client application and the Portal use HTTP/SSL connections to securely transfer queries and results between the application and the Portal. The application uses ODBC connections to the local DataMart databases used to process queries and generate results.

Audience

This manual is intended for DataMart Administrators who want to:

- Install the DataMart Client
- Process queries distributed to the DataMart
- Administer DataMart settings and accessibility
- Add DataMarts
- Manage and audit DataMarts

Related Documents

For more information about the Portal, see one of the following documents:

Investigator Guide

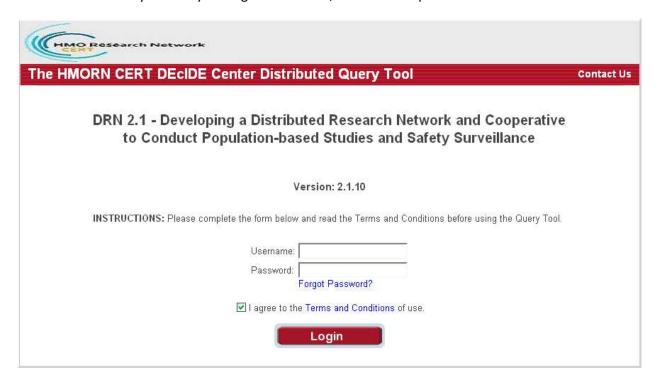
The *Investigator Guide* describes the tasks and activities required for Investigators to:

- Get started accessing the Portal
- Submit a query to the available DataMarts
- Monitor status of a query
- Review results of a query

The Investigator Guide also describes the types of queries and the criteria required for submission of each query type.

2 How to Login to the Web Portal

Before you can login to the Portal, you need a username and password assigned by the System Administrator. Once you have your Login Credentials, follow the steps below.



- 1. Navigate to the website login page (given in welcome email.).
- 2. Enter your username and password in the boxes.
- 3. If this is your first login, you will be prompted to read and acknowledge your agreement to the Terms and Conditions of use. If you have cookies enabled, you will only be prompted once.
- 4. Check the check box to agree to the Terms and Conditions of use (Initial Login only)
- 5. Click the Login button to enter the website portal.

3 How to Install the DataMart Client

This section describes the installation setup of the 2.0 DataMart Client.

Your local computer user account must have administrative privileges to install the DataMart Client.

Note: You do not need to uninstall a prior version of the DataMart client when installing a new, upgraded version of this software. This happens automatically. If for any reason, you do need to uninstall the DataMart Client, see Section 10: Uninstalling the DataMart Client.

There are four basic steps to setting up the DataMart Client:

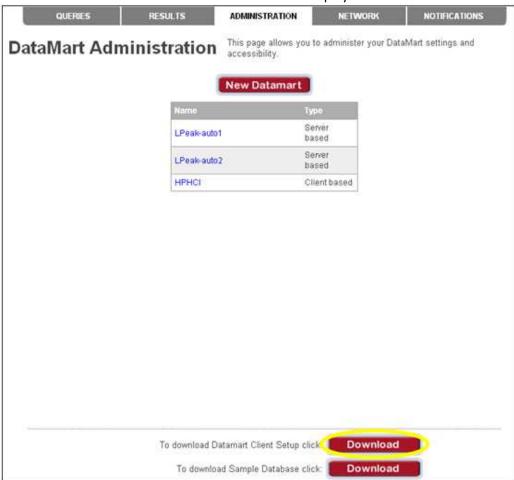
- Download and install the DataMart Client
- Create an ODBC Data Source Name (DSN) for your DataMart. Note: This will help link your DataMart Client with your DataMart. The DataMart is created separately.
- Configure the DataMart Client to point to your ODBC DSN (DataMart)

3.1 Installing the DataMart Client

Use these steps to install the DataMart Client:

1. Login to the web portal using your DataMart Administrator login credentials provided by the Coordinating Center.

2. Click on DataMart on the Administration tab to display the DataMart Administration page.



- 3. Click the Download button at the bottom of the page to download the DataMart Client setup.
- 4. When prompted, click Run:



5. In the next dialogue box, click Run again:



6. Click Next to begin the Setup:



7. Select the installation folder then click Next:



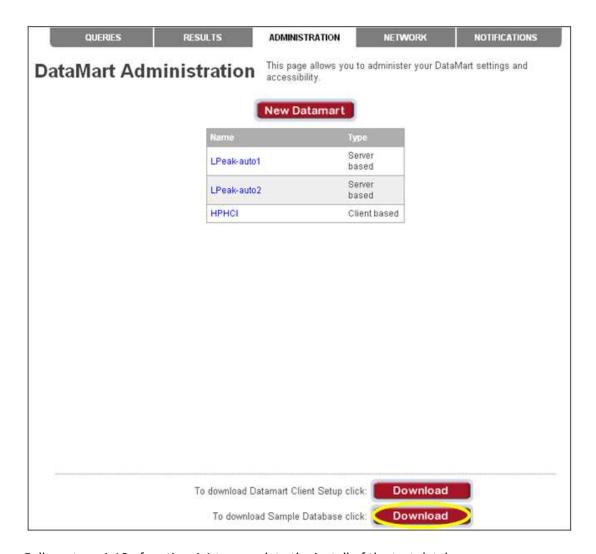
8. Click Next to confirm the installation:



3.2 Installing the Database (DataMart)

To connect a DataMart to the DataMart Client, save the DataMart to the desired folder on your local computer or network. The DataMart database is usually a Microsoft Access database file that has an .mdb file extension. Other database types (for example, MySQL) are supported. All DataMarts within the system are created separately under guidance of the Coordinating Center. If you want to install a database for testing purposes:

- Log onto the Portal https://querytool.distributedresearchnetwork.org/AHRQPortal.
- 2. Under the Administration tab, click on DataMarts.
- 3. At the bottom of the page, click on the button to download the test database.



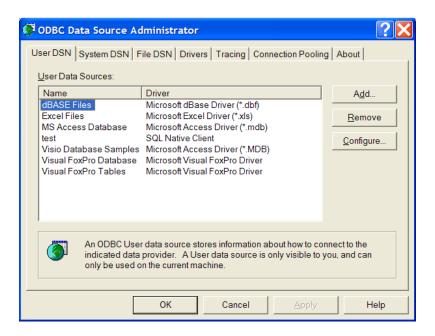
Follow steps 4-10 of section 4.1 to complete the install of the test database.

3.3 Creating an ODBC Connection

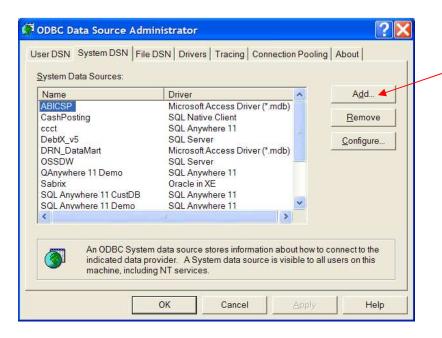
Once you have installed the DataMart client and your database, you must create an Open Database Connectivity (ODBC) connection to your data source.

Use these steps to create an ODBC connection:

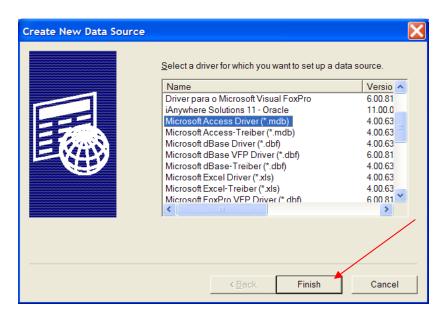
 Go to Start > Settings > Control Panel > System and Security > Administrative Tools > Data Sources (ODBC):



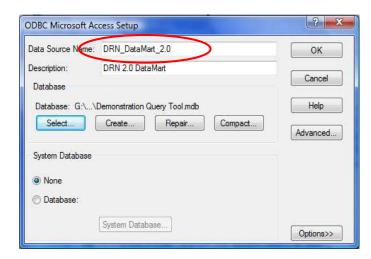
2. Click on the System DSN tab and click the Add button.



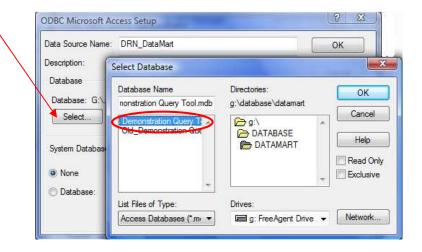
3. In the Create New Data Source window, choose Microsoft Access Driver (*.mdb) and click Finish:



- 4. Enter the Data Source Name and locate the database:
 - a) Under Data Source Name, type the name of your data source, for example: **DRN_DataMart_2.0.**



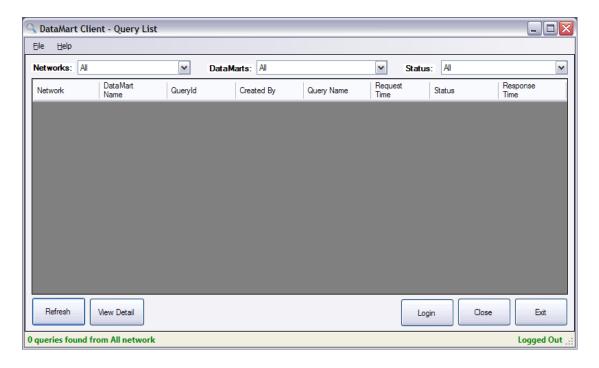
b) Click the "Select" button to locate your database. Make sure to select your database from the folder that you saved it to in section 3.2 above. Click OK and then click OK again to save:



3.4 Configuring your DataMart Client to use your ODBC Connection

Use these steps to configure the DataMart Client to use your ODBC connection:

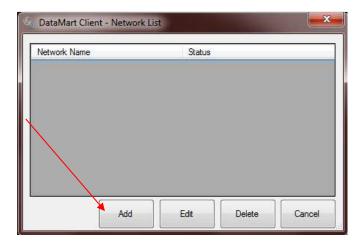
5. Double-click on the DRN DataMart Client icon on your desktop to open the DataMart client.



6. Click on File > Settings



7. Click the Add button



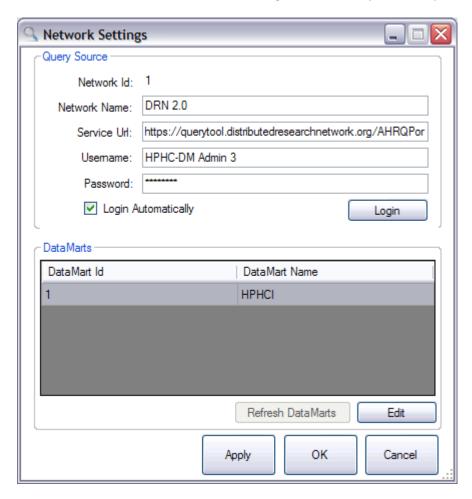
8. On the Network Settings page, enter the Network name, the Service URL, and your DataMart Administrator login credentials as follows:

Network Name DRN 2.0 (for example)

Service URL The production URL for the site, provided to you by the

Coordinating Center.

Username and Password Your login credentials, provided by the Coordinating Center



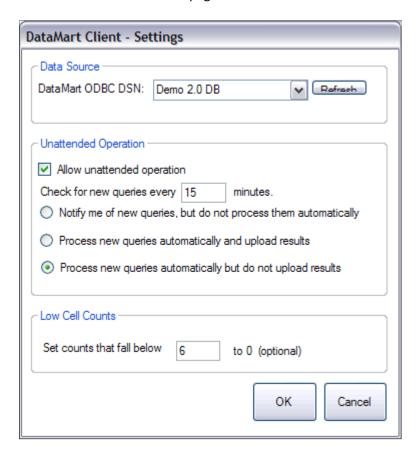
9. Click Login.

Note: Select the "Login Automatically" checkbox to save your credentials and login automatically without prompting for user name and password the next time the DataMart Client is launched. You can disable the automatic login feature from the File > Settings menu.

10. On the Network Settings page select Edit to connect the DataMart Client to the DataMart using the ODBC connection. Use the Data Source dropdown menu to select the DataMart name you created in Section 3.3 Creating an ODBC Connection, step 5a above (for example, DRN_DataMart_2.0). This is the DataMart that will be used when queries are sent to the

DataMart.

Note: Once you have set up your ODCB connection you should do an Update Dates query as described in section 6.2 Managing Your DataMarts. This ensures that the information about what queries your DataMart has available and for what time period is displayed on the Portal DataMart Administration page.



3.5 Configuring DataMart Client Settings

On the DataMart Client network settings page (see screenshot above), set the unattended operation and low cell count settings.

3.5.1 Unattended Operation Settings

The Unattended Operation settings permit fully manual, semi-automated or fully automated query processing. If you select "Allow unattended operation", unattended operation checks for new queries at the designated interval, and processes the queries according to the options you select. Enter the time interval in minutes.

Unattended Operation Settings

Option

Notify me of new queries, but do not process them automatically

Description

The DataMart Client checks for queries at the selected interval and notifies the DataMart Administrator via a pop-up notification in the System Tray above the DataMart Client icon.

Process new queries automatically and upload results

The DataMart Client checks for queries at the selected interval, processes the query automatically, and uploads the results. This option does not require any DataMart Administrator intervention in the process.

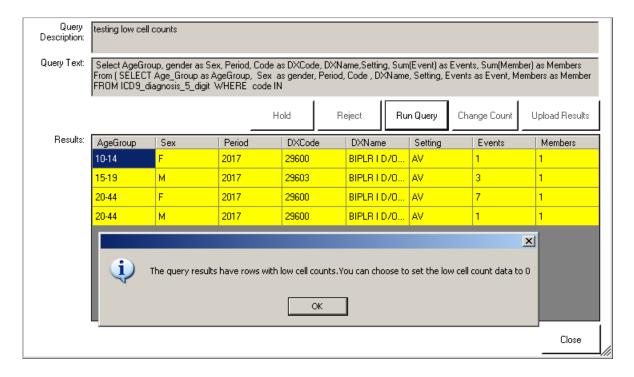
Process new queries automatically but do not upload results

The DataMart Client checks for queries at the selected interval and processes the query automatically, but the DataMart Administrator must upload and review the query results manually.

3.5.2 Low Cell Count Settings

The low cell count setting allows you to specify a cell count limit for results. This setting scans the query results for any individual cell that is less than the specified limit and highlights that row in yellow. You can then choose to upload the results without changing the low cells or click "Change Count" to change the relevant cells to zero before uploading.

Note: If you select "Process new queries automatically and upload results" in the Unattended Operation settings, results will be uploaded regardless of the low cell count setting.



4 Processing Queries

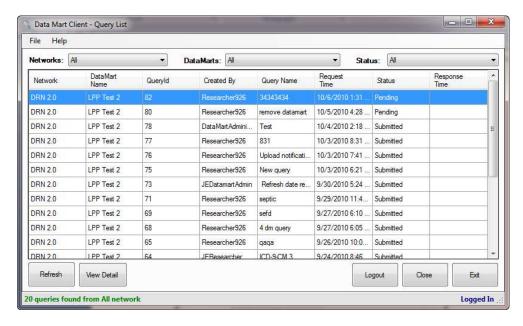
Once you have configured the DataMart Client, you are now ready to process all Queries distributed to your DataMart. As DataMart Administrator, you have the rights to perform the following operations on a query:

- Execute and review results
- Hold
- Reject
- Change Cell Counts
- Upload Results

4.1 Displaying the Query List

Double-click the DataMart Client icon on the desktop to display the list of queries.

The Query List form displays the status of all queries across all Networks and DataMarts for which you are a DataMart Administrator. You can filter the display by Network, DataMarts, and Query Status to show a subset of the queries submitted to your DataMarts. When you select a filtering option from the drop-down list, the Query List is refreshed automatically.



4.1.1 Filtering Options

Use the drop-down controls at the top of the screen to filter your list. You can filter by the following:

Option	Description
Networks	The Networks drop-down list displays the list of networks that the
	DataMart application is subscribed to in addition to an "All" selection.
	Choosing a specific network selection populates the list with all queries

from the chosen network. There will be at least one network.

DataMarts The DataMarts drop-down list displays the DataMarts that you are

configured to administer within the selected Network(s) in addition to an

"All" selection. Each network will have at least one DataMart.

Status The Status drop-down list allows you to view queries by status: Pending,

Submitted, Completed, Awaiting Approval, Rejected, Cancelled, Pending Group DataMart Administrator Approval, In Progress, or Failed in addition

to an "All" selection.

4.1.2 Query Status

When viewing queries by status, you can sort on the following options:

Status	Description
All	Displays all queries. Does not filter by status.
Pending	The query has been submitted to the DataMart, but not yet processed by the background service (HubBackgroundService). Pending is an intermediate state, usually very short. Once the background service has processed the query, it changes the status to Submitted.
Submitted	The query has been submitted to the DataMart and processed by the background service. Submitted and Pending both mean that an Investigator has submitted a query. The only difference is that the intermediate state of Pending gets changed to Submitted by the background service that polls the database for new queries. If the query status does not get changed to Submitted, the background service is not working.
Completed	The results of the query have been uploaded to the Portal. Queries are marked Completed when results have been uploaded by the DataMart Administrator (via DataMart Client) or by the Server DataMart.
Awaiting Approval	The query has been received by the DataMart but requires approval from the DataMart Administrator before it is executed. The DataMart Administrator can set a query to Awaiting Approval by clicking the Hold button in the Query Detail view of the DataMart Client. See Section 4.3 Holding Queries. After further review, you may upload the queries you hold that are Awaiting Approval.
Rejected	The query has been rejected by the DataMart Administrator. The DataMart Administrator sets the query state to Rejected by clicking the Reject button in the Query Detail view of the DataMart Client. See Section 4.4 Rejecting Queries. Rejecting a query ends the life of the query submitted to that DataMart.
Cancelled	The Investigator has removed the DataMart from the query. Removing

DataMarts from a query marks the status of the query for the removed DataMart as Cancelled. Note: The Investigator cannot remove a particular DataMart from the query after it has uploaded results.

Pending Group DataMart Administrator Approval The query has been received by the DataMart but requires approval by the Group DataMart Administrator. A check box on the Group Administration screen allows you to require all DataMarts in the Group to seek approval from the Group DataMart Administrator. If Group DataMart Administrator Approval Required is checked, all results uploaded by DataMarts that are part of the Group's organizations require this approval. The uploaded results are hidden from the Investigator unless approved by the Group DataMart Administrator.

In Progress

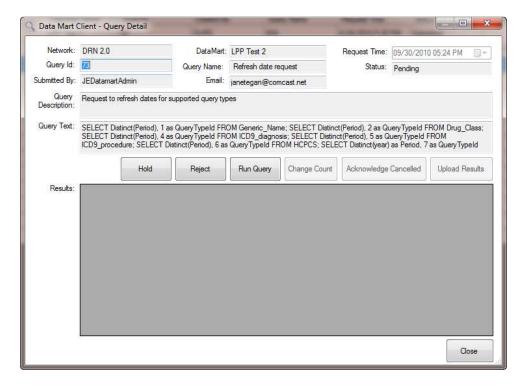
The query has been processed at the DataMart Client but uploading the results has not finished. For example, if you have selected "Process new queries automatically but do not upload results" in the DataMart Client settings, you might see the In Progress status. See Section 3.5.1 Unattended Operation Settings.

Failed

The query encountered errors while processing or failed to upload results

4.1.3 Viewing Query Details

Highlight an entry in the list and click the View Detail button to open the Query Detail view. You can also double-click an entry in the results list.



4.2 Executing and Uploading Queries

You can execute a query by clicking Run Query in the Query Detail view. This will send the query to the DataMart for execution and return the results. Results will be displayed in the Results window. Click on the Upload results button to upload the results of the query to the Portal.

4.3 Holding Queries

You can put a query on hold to notify the requestor that you have received the query but have not yet executed it. To do this, click Hold in the Query Detail view. The query status on the Portal will change from submitted to "Awaiting Approval".

4.4 Rejecting Queries

Queries can be rejected before or after execution. To reject a query, click Reject in the Query Detail view. You have the option to provide a reason for the rejection. The query status on the Portal changes to Rejected and the reason is provided to the requestor.

5 File Distribution

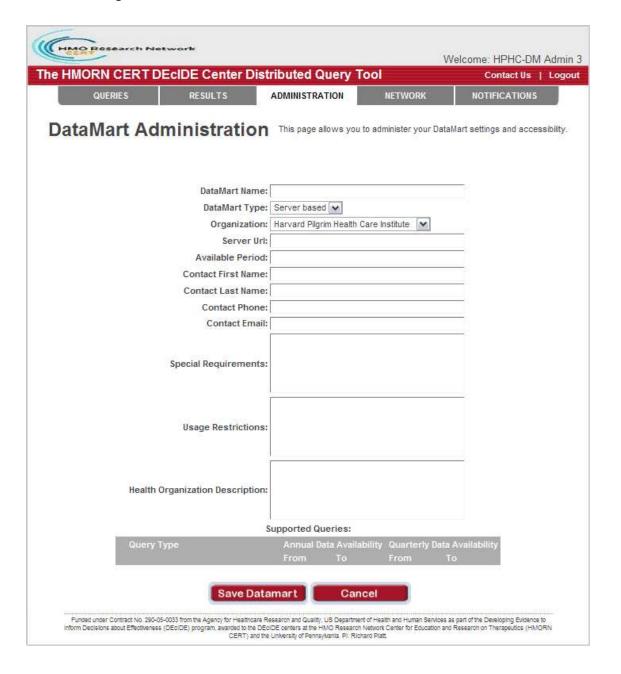
The File Distribution screen allows distribution of any type of file to the network DataMarts. These "queries" will appear in the DataMart Client in the same way other queries appear. As DataMart Administrator, you see this file as an attachment in the Query Details page in the DataMart Client program. You can then download and process it as desired.

Any role that has the right to submit queries can upload a file, but only the DataMart Administrator sees the file in the DataMart Client application.

6 Administering Your DataMart

As the DataMart Administrator you can perform several tasks on the web Portal. These tasks are:

- Viewing overview information (metadata) about network DataMarts
- Managing your DataMarts
- Selecting which types of queries to allow
- Selecting who can submit queries to your DataMart
- Creating an audit review of the DataMart

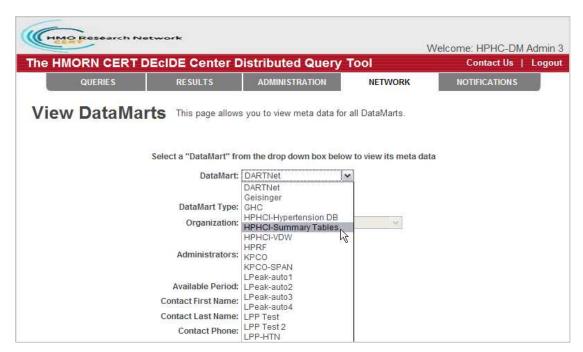


6.1 Viewing DataMart Information

You can view overview information for any network DataMart.

Select DataMart on the Network tab to view metadata for any network DataMart. This displays the View DataMarts page. The DataMart box appears blank.

To view the metadata for a specific DataMart, choose the DataMart from the DataMart drop-down list.



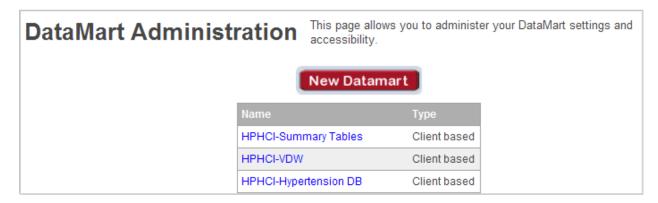
Note: The View DataMarts page only displays the information. You cannot update it from this page.

6.2 Managing Your DataMarts

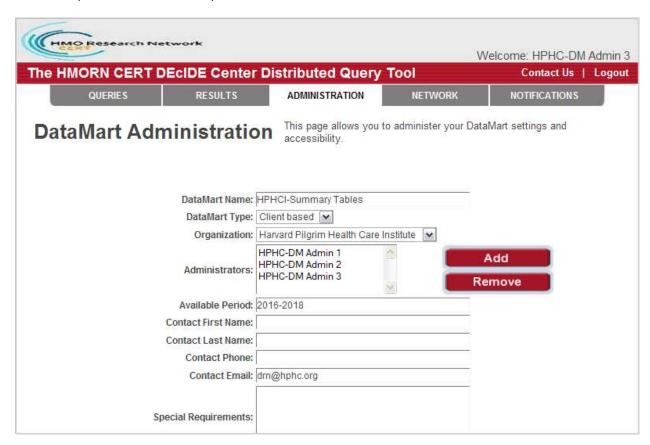
You can manage multiple DataMarts through the DataMart Administration screen. Use the DataMart Administration screen to manage DataMart information such as contact information, special requirements, or descriptions of organizations, usage restrictions, etc. You can also add or remove other administrators of the DataMart.

Select DataMart on the Administration tab to go to the DataMart Administration page, where you can view a list of your DataMarts.

Click on the name of the DataMart that you want to manage.



The DataMart Administration screen displays the settings for the DataMart that you selected. You can view and update the contents of your DataMart from this screen.



6.3 Determining which Types of Queries to Allow

Before you can determine which types of queries to allow you must first determine what queries your DataMart has available and for what time period. To make this information available on your Portal DataMart Administration page, select the Update Dates button at the bottom of the page. This sends a query to the DataMart, you must respond to the query to establish the periods available for querying in

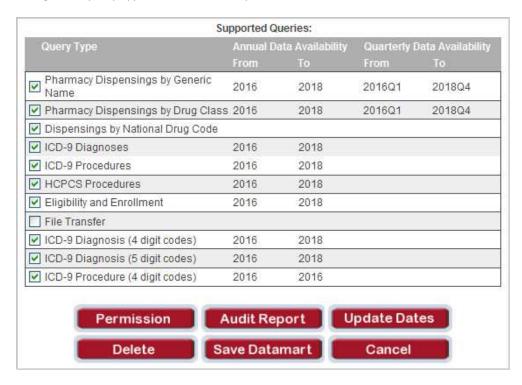
the DataMart. The page displays a list of query types with check boxes, and should also include the periods available for querying based on the Update Dates query. You must check the box next to each query type that you want to allow. There is no "select all" function. If you do not select a query type, no one in the network will be able to submit that type of query to your DataMart.

You can also select whether or not to allow File Distribution for this DataMart. Locate File Transfer in the list of query types and check the box.

The query types are:

- 1. Eligibility and Enrollments
- 2. HCPCS Procedures
- 3. ICD-9 Diagnoses (3 digit codes)
- 4. ICD-9 Procedures (3 digit codes)
- 5. ICD-9 Diagnosis (4 digit codes)
- 6. ICD-9 Diagnosis (5 digit codes)
- 7. ICD-9 Procedures (4 digit codes)
- 8. Pharmacy Dispensings by Generic Name
- 9. Pharmacy Dispensings by Drug Class

The query types refer to the specific tables included in the DataMart database. If a query type is not selected, that query type will not be available for anyone in the network for your DataMart. You may change the query type selections at any time.

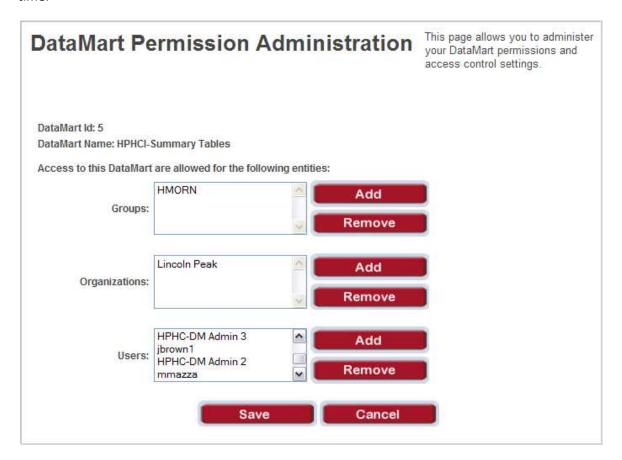


6.4 Determining Who Can Submit Queries to your DataMart

Click the Permissions button to administer the permissions and access control settings for the DataMart. The settings allow you to choose specific groups, organizations, or users that you authorize to submit queries to the DataMart.

You can give permission to query the DataMart to Groups, Organizations, or Users. If you give permission to a Group, then every user in every organization that is part of the group will be permitted to query that DataMart. For example, if Kaiser Permanente is a group and Kaiser Permanente Colorado and Kaiser Permanente Georgia are members of the group, then allowing the group Kaiser Permanente to query the DataMart also allows all users associated with Kaiser Colorado and Georgia to query the DataMart. Giving permission to specific organization means that all users affiliated with the organization will have the ability to query the DataMart. Access to a DataMart also can be determined on a user-by-user basis.

Use the Add and remove buttons to make and modify selections. The permissions can be changed at any time.



6.5 Creating an Audit Review

Click the Audit Report button on the DataMart Administration page to request an audit of any of your DataMarts. The Audit Report allows you to view all the activity that has been requested from any of your DataMarts.



Select the start and end dates for your report, whether you want a summary or a detailed report, and how you want the data fields in the report to be ordered. Click the PDF Report button to create the report. This creates a file named DataMartAuditSummaryReport.pdf or DataMartAuditReport.pdf depending on whether you choose Summary or Detail.

7 Notification Options

This section describes how to set up notifications to be sent to your email address. You must be logged in as the DataMart Administrator to change DataMart Administrator notification settings. Click Notification Options on the Notifications tab at the top of the page to display the Notification Options page.



The Notification Options page lists the types of DataMart transactions and events for which you can enable email notification. It includes both Investigator notifications and DataMart Administrator notifications. Many of these notification choices are intended to give DataMart Administrators information about any changes made to the settings of their DataMarts.

The Notification Options for the DataMart Administrator are:

Results Viewed	Notifies you when an Investigator views the results of a query
Query Type Added	Notifies you when a new query type has been added to the list of supported query types for your DataMart
Query Type Removed	Notifies you when a query type is no longer supported for your DataMart
New User	Notifies you when a new user has been added to the list of those allowed to send queries to your DataMart
User Removed	Notifies you when a user has been removed from the list of those allowed to send queries to your DataMart
New Organization	Notifies you when an Organization has been added to the list of organizations that can send Queries to your DataMart
Organization Removed	Notifies you when an Organization has been removed from

the list of organizations allowed to send queries to your

DataMart

New Group Notifies you when a group has been added to the list of

groups allowed to send queries to your DataMart

Group Removed Notifies you when a group is removed from the list of

groups allowed to send queries to your DataMart

New Query Notifies you when a new query has been submitted to your

DataMart and requires your action to process it

User Profile Updated Notifies you when a user has updated his/her user profile

Query Reminder Notifies you when a previously submitted query is still

pending and requires your attention in order to process it

The notification options for the Investigator role are:

Query Status Change Notifies you when your submitted query has been on placed on

hold or rejected by the DataMart administrator that you submitted

the query to.

New Results Notifies you when the DataMart administrator has accepted your

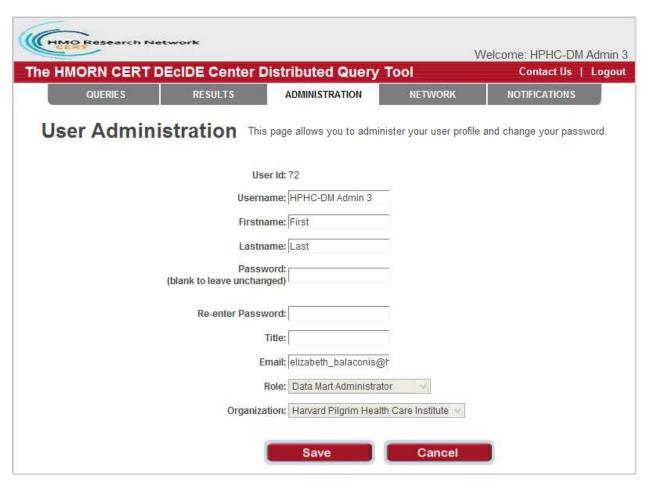
query and the query results have been uploaded.

Query Submitter Reminder Notifies you when one or more DataMarts have not uploaded

results for the query submitted.

8 Administering or Changing your User Profile

This section describes how to administer your user profile. You must be logged in to the web portal to administer your user profile. Click Users on the Administration tab located at the top of the screen. The screen displays your user profile.



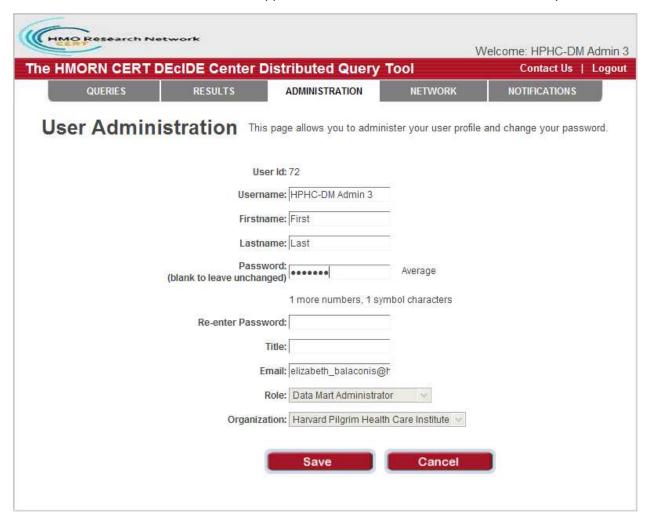
8.1 How to Reset your Password

Your user profile has two boxes for passwords. To change your password:

- 1. Enter the new password in the first Password box.
- 2. Re-enter the new password in the second Password box.
- 3. Click the Save button.

Note: All passwords must meet the following complexity standard:

- Length must be at least 7 characters
- Password must include at least 1 upper case letter, 1 lower case, 1 number, and 1 symbol.

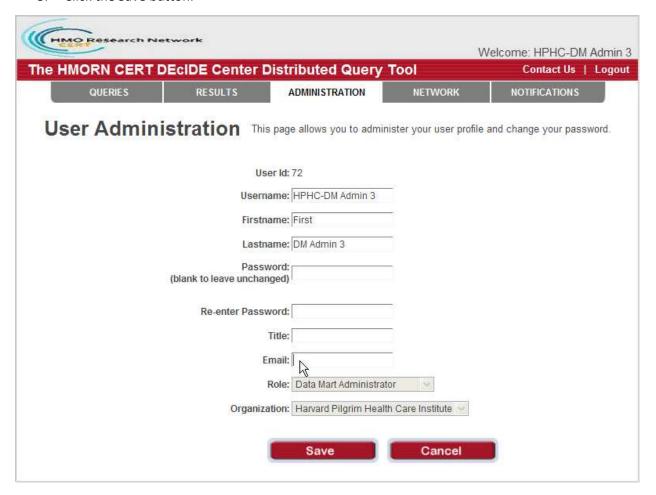


Once you initially get your login credentials from the System Administrator, it is highly advised that you change your password from the default password given to you.

8.2 How to Update your E-mail

To update your E-mail address:

- 1. Access your user profile as described above.
- 2. Enter your new e-mail address in the box provided.
- 3. Click the Save button.



9 Getting Help

If you have trouble submitting a query to a specific DataMart, please contact the Coordinating Center.

If you have trouble accessing the Web Portal or your user account, click on the Contact Us link and describe your issue in the email to drn@lincolnpealk.com to request help from the Coordinating Center support staff.

9.1 Frequently Asked Questions

This section lists some of the most frequently asked questions.

What is the difference between Groups, Organizations, and Users?

A user is a person who has login credentials to the network Portal. Users are associated with one Organization. Organizations can be associated with one or more Groups. A Group is a set of network Organizations and can only be created by the System Administrator. A user is typically associated with their employer organization. Organizations can be Data Partners (for example, Kaiser Permanente Colorado), federal agencies (for example, AHRQ, NIH), or affiliated institutions such as academic medical centers.

Users are individuals with various roles and associated rights within the system such as Investigator, DataMart Administrator, and System Administrator.

What are my rights as a user and how can I change them?

Rights can only be assigned to various roles by the System Administrator. The System Administrator can also assign rights to multiple users by giving that right to an Organization or Group.

10 Uninstalling the DataMart Client

Use these steps to uninstall the DataMart Client:

- 11. Go to "Control Panel > Add / Remove Programs" or "Control Panel > Programs and Features" depending on which version of Windows you are using.
- 12. Double click "DRN 2.0 Data Mart Client" in the list of installed items displayed



- 13. Click Yes in the pop up dialog box, "Are you sure you want to uninstall DRN Data Mart Client"
- 14. **Note**: Uninstalling and installing software on operating systems like Vista might require additional authorization due to the enhanced security features (user account controls) built in to the operating system. Click "Yes" when prompted.
- 15. (No action required) **Note**: A success message will be displayed upon successful removal of the DataMart Client.