

Distributed Query Tool

DataMart Administrator Manual

Powered by PopMedNet™

Based on release 3.2

March 2013

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The PopMedNet™ application was developed under Contract No. 290-05-0033 from the Agency for Healthcare Research and Quality, US Department of Health and Human Services as part of the Developing Evidence to Inform Decisions about Effectiveness (DEcIDE) program, awarded to the DEcIDE centers at the HMO Research Network Center for Education and Research on Therapeutics (HMORN CERT) and the University of Pennsylvania. The Food and Drug Administration's Mini-Sentinel project (Contract No. HHSF223200910006I) provided additional support.

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1 Introduction

The **PopMedNet™** software application enables simple, efficient creation and use of distributed data networks, through a set of tools and web-based services. It is optimized to facilitate distributed analyses of medical product safety, comparative effectiveness, quality, medical resource utilization, cost-effectiveness, and related studies. The system provides secure, customized private portals, query tools, and file transfer capabilities. It supports both menu driven queries and distributed analyses using complex, single use or multi-use programs designed to execute against a local data resource.

Data partners exercise full control over the files they make available for querying, the results returned to requestors, and the individuals who are permitted to submit queries.

This [DataMart Administrators Manual](#) describes the main features and functions for DataMart Administrators participating in a health data network powered by PopMedNet™ software. DataMart Administrators will interact with the PopMedNet™ network through a secure web-based Portal and through the desktop DataMart Client as described below. This document is based on the version 3.x implementation of the PopMedNet™ system. Different networks will have different types of queries and capabilities. Networks powered by PopMedNet™ software can customize and brand the network as desired.

The Department of Population Medicine at the Harvard Pilgrim Health Care Institute (HPHCI) led development of the system in collaboration with Lincoln Peak Partners (LPP). Lincoln Peak Partners provides support services and secure hosting for current system users, and leads development of system enhancements.

2 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 each data partner has one or more “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.

Browser Requirements

The Portal is designed to work with Internet Explorer (IE) 8 or later. Earlier versions of IE may not display the user interface properly. Although IE8 is the only officially supported browser, other browsers such as Firefox and Chrome will also work. Firefox and Chrome have been used extensively during testing.

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. Note the DataMart Client requires Microsoft .NET 4 to be installed on the user's desktop. The free download for Microsoft .NET4 is available at the following link: <http://www.microsoft.com/enus/download/details.aspx?id=17851> All communications between the DataMart Client application and the Portal use HTTP/SSL/TLS 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 Distributed Query Tool 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 PopMedNet™ system, see one of the following documents:

Distributed Query Tool Investigator Manual

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

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

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

Distributed Query Tool Overview and Administrators Guide

The *Overview and Administrator's Guide* describes the overall network system architecture, key querying features, and hosting and security details. This includes:

- System overview and workflow
- Policies and features
- Installing an instance of a Portal and an associated database
- Performing the initial administrative setup
- Performing typical System Administrator functions such as adding new users and DataMarts, creating new roles, and deleting users and DataMarts
- Technical architecture and security
- Hosting Configurations

3 How to Login to the Web Portal

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



1. Navigate to the custom website login page:
[Secure URL distributed by network coordinating center]
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 not be prompted on subsequent logins.
4. Click the Login button to enter the website Portal.

4 Configuring the DataMart Client

This section describes the installation setup of the 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 three 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).

4.1 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 PopMedNet™ Support Staff.
2. Navigate to the DataMart list page (Network>DataMarts).

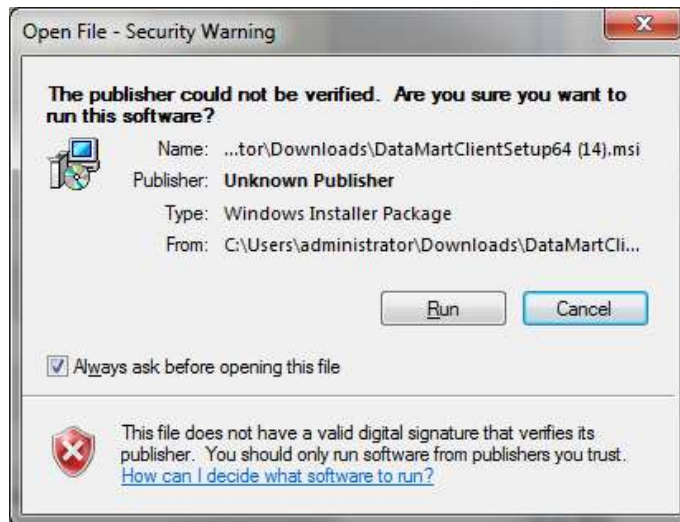


3. Click on your DataMart entry in the list to display the DataMart profile.

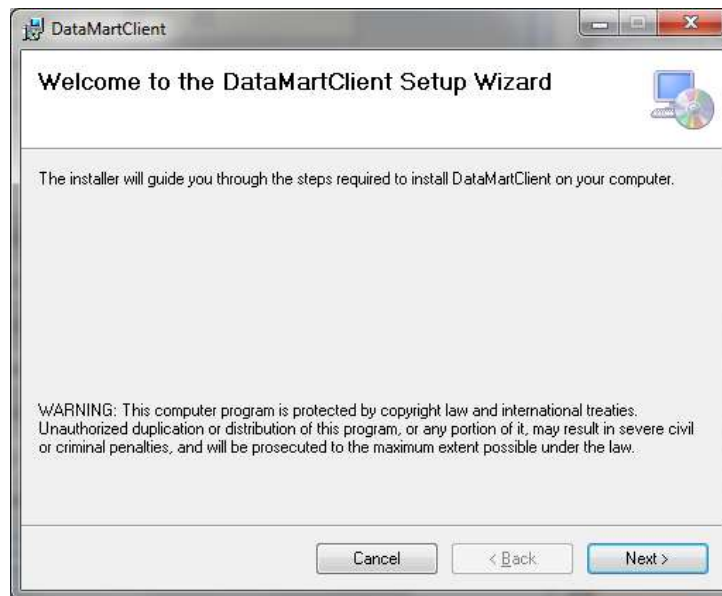
The screenshot displays the PopMedNet Distributed Query Tool DataMart Administrator web interface. The top navigation bar includes links for Home, Requests, Profile, Resources, Reports, Network, Contact Us, and Logout. A breadcrumb trail shows the path: Network > Organizations > HPHC-QPS > LPP > LPP-ATLE > DataMarts > LPP-Atlanta Manual DM. The main content area is titled 'DataMart Info' and contains several input fields: Name (LPP-Atlanta Manual DM), Organization (LPP-Atlanta), Contact First Name (Bruce), Contact Last Name (Swan), Contact Phone, Contact Email, Sample Request Monthly, Storage Restrictions, and Health Plan Description. Below these fields are three tabs: Installed Models, Access Control, and Downloads. The Downloads tab is active, showing links for 'Download DataMart Client 32-bit version', 'Download DataMart Client 64-bit version', 'Download Sample Database for Summary requests', and 'Configure DataMart Client'. At the bottom of the form are 'Save', 'Cancel', and 'Delete' buttons. The footer includes the version number (3.0.25), a link to Terms and Conditions, the copyright notice (© 2012 PopMedNet, All Rights Reserved), and the LINCOLN PEAK logo.

4. Click the Download button at the bottom of the page to download the DataMart Client setup.
Note: Install the 32-bit or 64-bit version depending on your operating system.

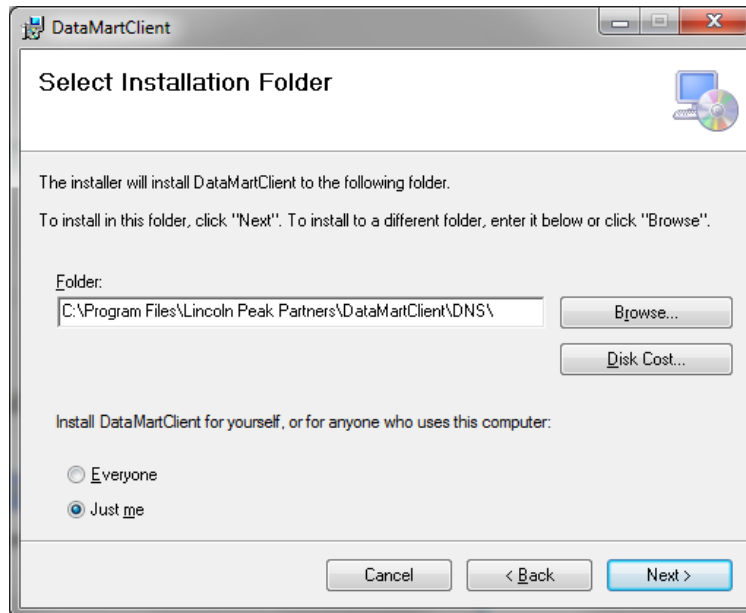
5. When prompted, click Run:



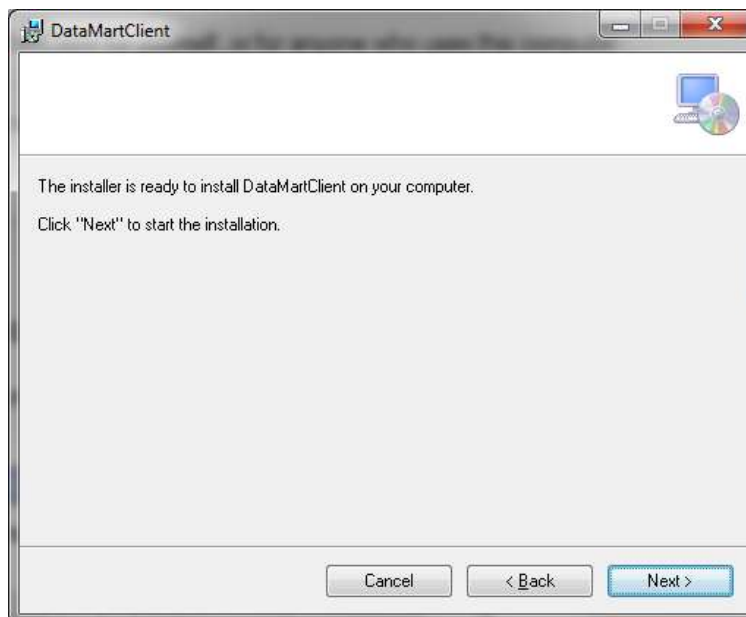
6. Click Next to begin the Setup:



7. Select the installation folder then click Next:



8. Click Next to confirm the installation:



4.2 Installing the Database (DataMart)

To connect a DataMart database 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 or .accdb file extension. Other database types for example, MySQL are supported. All DataMarts within your network are created separately under guidance of your Network Administrator.

Note: It is important to remember the folder (i.e., location) and file name of your saved database, as this will be required information when you establish your open database connectivity (ODBC) connection (i.e., connect your DataMart Client to your database location) – see the next section.

Also, for testing purposes, there is a sample summary table database (Demonstration Query Tool.mdb) available on the DataMart profile page. To download the sample database, click the download button at the bottom of the page. After you click the download button you will be prompted to save this file. The default name may be changed upon saving the file.

4.3 Creating an ODBC Connection

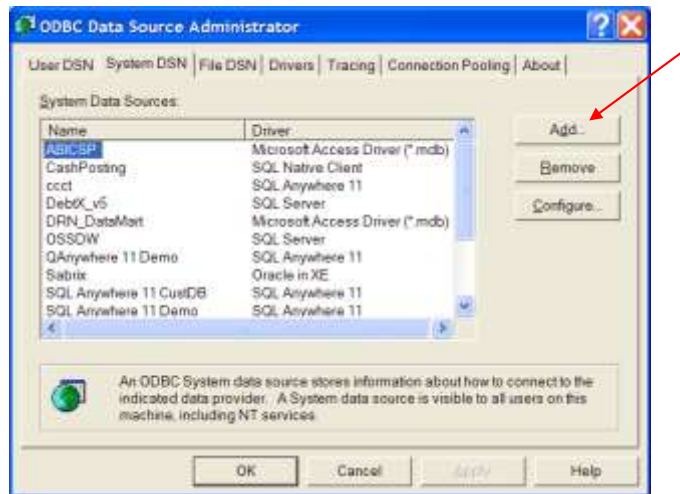
Once you have installed the DataMart Client and your database, you must create an Open Database Connectivity (ODBC) connection to your data source.

Use these steps to create an ODBC connection:

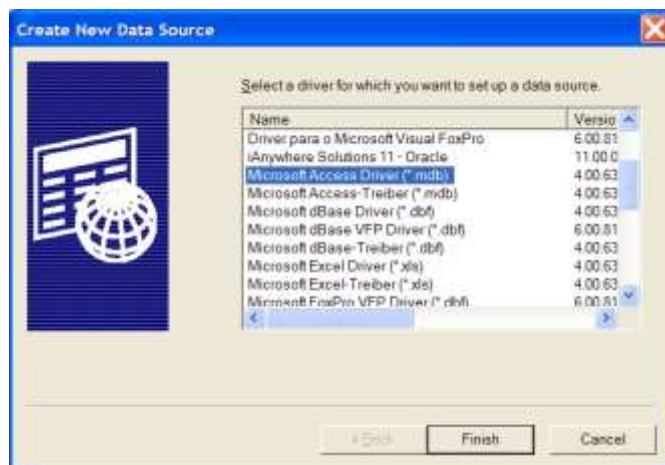
1. Go to Settings>Control Panel > Administrative Tools > Data Sources (ODBC):



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: **[Network Name]_SummaryTables**.



- 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 [4.2](#) ~~4.2~~ above. Click OK and then click OK again to save:

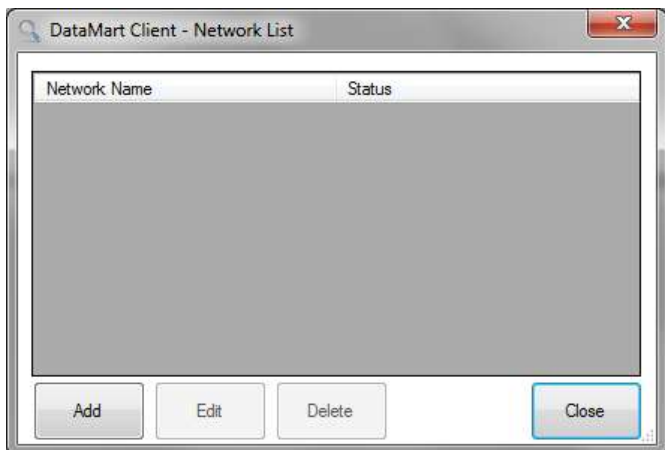


4.4 Configuring your DataMart Client Network Connection

The first time you launch the DataMart Client application you need to configure it to connect to the network Portal. The following form is displayed:



1. Click the “Open Settings” link to display the Network List form. Note, if this is not your first DataMart Client launch, select the Settings button.



2. Click the “Add” button to enter the network connection settings:

Network Settings

Query Source

Network Id:

Network Name:

Service Url:

Username:

Password:

X.509 Certificate: CN=bswan.lincolnpeak.com, OU=Development, O=Linc

Test

DataMarts

DataMart Id	DataMart Name
-------------	---------------

Refresh DataMarts Edit

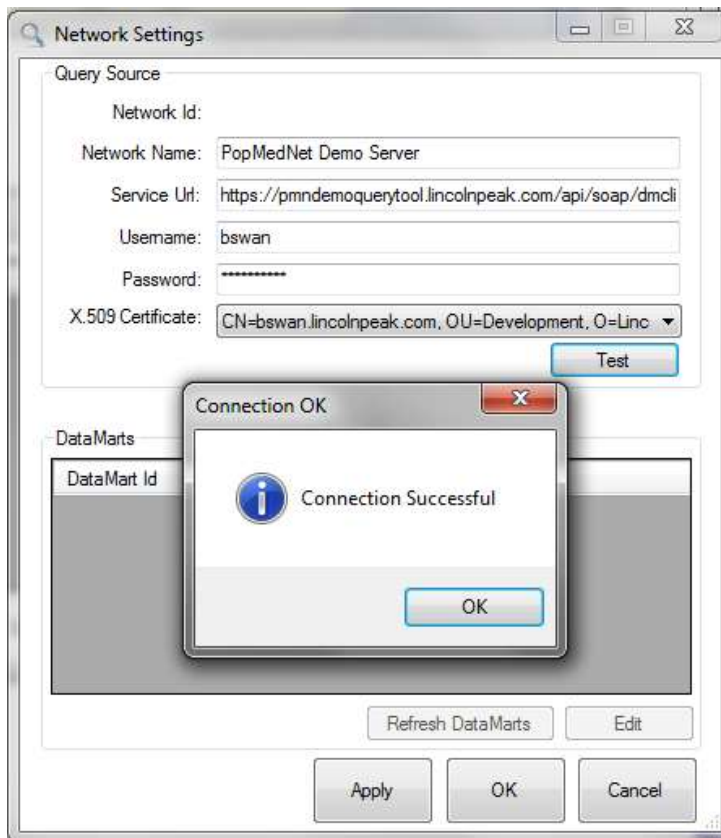
Apply OK Cancel

3. Enter a friendly network name and the network Portal web service URL in “Service URL” edit control that follows the following pattern:

<https://{YourNetworkDomainName}/api/soap/dmclient>

“YourNetworkDomainName” is the same value you use when you log into the network Portal.

4. Next enter your username and password into the edit controls. If you’re using X.509 certificates to authenticate to the network, scroll through the list and choose the certificate you installed to access the PopMedNet network.
5. Now press “Test” button to test your connection information. You should see “Connection Successful” message box as follows:



*If the connection fails, see your Network Administrator for support.

6. Click the “OK” button on the message box to return to the Network Settings dialog box that will display the list of DataMarts you have rights to administer.

Network Settings

Query Source

Network Id:

Network Name: PopMedNet Demo Server

Service Uri: https://pmndemoquerytool.lincolnpeak.com/api/soap/dmcli

Username: bswan

Password: *****

X.509 Certificate: CN=bswan.lincolnpeak.com, OU=Development, O=Linc

Test

DataMarts

DataMart Id	DataMart Name
3	LPP - Atlanta Auto DM
4	LPP - Atlanta Manual DM
5	LPP - Boston Auto DM
6	LPP - Boston Manual DM
7	LPP - India Manual DM
8	LPP - India Auto DM

Refresh DataMarts Edit

Apply OK Cancel

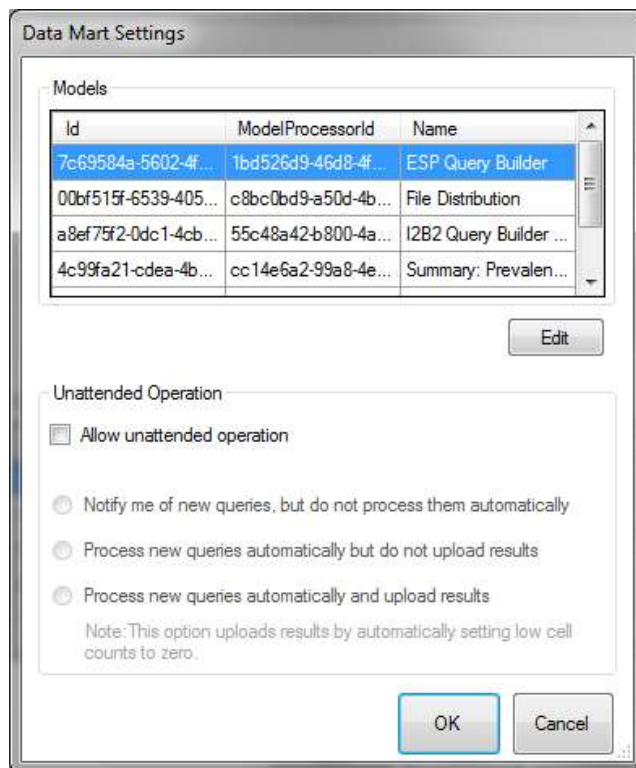
- Click the “Apply” button to save your connection settings and proceed to section 4.5 to configure your DataMart.

4.5 Configure Your DataMarts

Now that you are connected to the network, you need to configure the settings for each of the DataMarts you’ve been granted privileges to administer. For each DataMart in the list, perform the following steps:

- Double click the DataMart item in the list of DataMarts or select it and press “Edit”.

This action will display the DataMart Settings dialog as follows:



There are two sections that need to be configured. First, there is a list of “Models” that represent the various request model processors that are used to process queries issued to your DataMart.

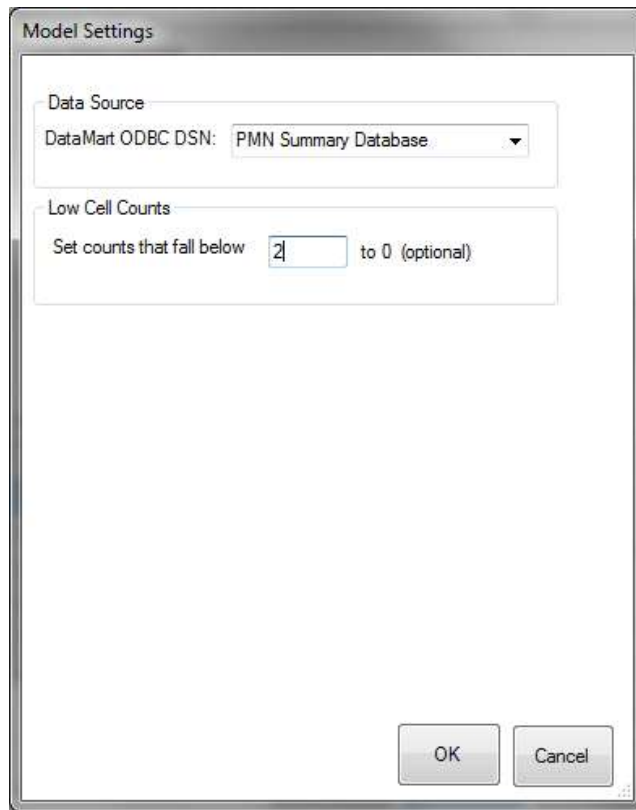
For each item in the list, double click it or select it and press Edit and proceed to step 2 below.

2. Edit each Model Processor and configure settings

Each processor may have different properties that need to be set. The following sections describe these properties. Once this is done for all your model processors, proceed to section 4.6 Configure DataMart Unattended Operation.

4.5.1 Summary Query Model Processor Settings

For Summary Query model processors (Summary: Prevalence Queries, Summary: Incidence Queries, and Summary: Most Frequently Used Queries), the following dialog will be displayed:



Use the Data Source dropdown menu to select the DataMart name you created in [Section 4.3 4.3](#) [Creating an ODBC Connection](#) (for example, [Network Name]_Summary Tables). This is the DataMart that will be used when queries are sent to the DataMart. Any number of additional DataMarts can be created to direct queries to other data resources.

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. See the screenshot below for an example.

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.

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Query: testing low cell counts

Query Text: Select AgeGroup, gender as Sex, Period, Code as D0Code, D0Name, Setting, Sum(Event) as Events, Sum(Member) as Members
From (SELECT Age_Group as AgeGroup, Sex as gender, Period, Code, D0Name, Setting, Events as Event, Members as Member
FROM ICDS_diagnosis_2_dgl WHERE code IN

Hold Reject Run Query Change Count Upload Results

Results:

AgeGroup	Sex	Period	D0Code	D0Name	Setting	Events	Members
10-14	F	2017	29600	BIPLR I D/O...	AV	1	1
15-19	M	2017	29603	BIPLR I D/O...	AV	3	1
20-44	F	2017	29600	BIPLR I D/O...	AV	7	1
20-44	M	2017	29600	BIPLR I D/O...	AV	1	1

The query results have rows with low cell counts. You can choose to set the low cell count data to 0.

OK

Close

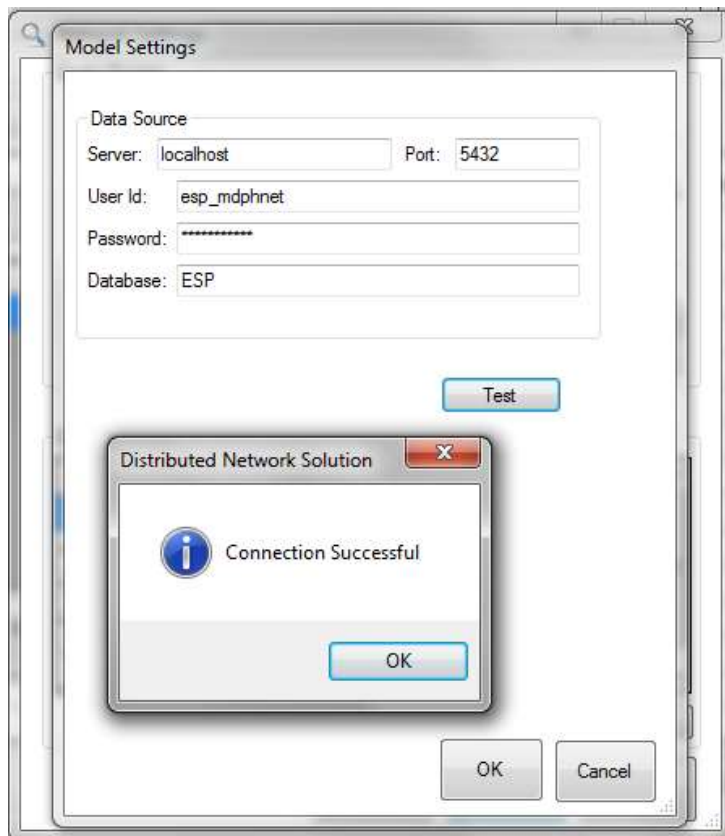
Press OK once you've entered the ODBC connection name and entered a value for the Low Cell Count threshold.

4.5.2 File Distribution Model Processor

Currently there is no setting for the File Distribution request's model processor.

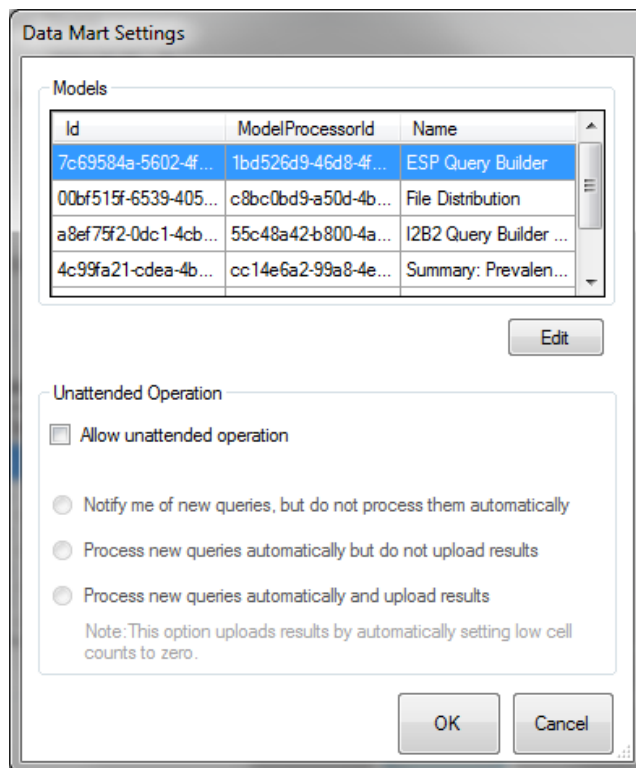
4.5.3 ESP QueryBuilder Model Processor

For the ESP QueryBuilder model processor shown below, you need to enter your connection string information to access the ESP database. See your local Network Administrator for guidance on entering these settings. Once you've entered your settings, click the "Test" button to ensure you can connect successfully to the database. If this fails, see your local Network Administrator to resolve the problem.



4.6 Configuring your DataMart Unattended Operations

Now that the model processors have been configured, you need to configure your DataMart's Unattended Operation settings. Once you have modified your settings, click OK to save and return the DataMart settings form:



The Unattended Operation settings allow the application to operate in a fully manual, semi-automated or fully automated query processing. If you select “Allow unattended operation”, unattended operation checks for new queries, and processes the queries according to the options you select. Users should minimize the application instead of logging out of the application so that automatic query processing takes place in the back ground - click ‘Close’ or minimize the Client from the Query List page.

Unattended Operation Settings

Option	Description
Notify me of new queries, but do not process them automatically	The DataMart Client checks for queries and notifies the DataMart Administrator via a pop-up notification in the System Tray above the DataMart Client icon.
Process new queries automatically but do not upload results	The DataMart Client checks for queries and processes the query automatically, but the DataMart Administrator must upload and review the query results manually.

Process new queries automatically and upload results	The DataMart Client checks for queries, processes the query automatically and uploads the results. This option does not require any DataMart Administrator intervention in the process.
--	---

5 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 a query
- Reject a query
- Change Cell Counts
- Upload Results

5.1 Displaying the Request List

Once you are connected to the network, you will see the list of requests that have been routed to your DataMart(s). The following figure shows the main request list view:

The screenshot shows the DataMart Client application window. At the top, there are filters for DataMarts (All), Status (All), and Dates (30 Days). Below these is a table with the following columns: DataMart Name, Priority, Due Date, Request ID, Created By, Request Name, Status, Request Time, Response Time, and Response By. The table contains 17 rows of data. The first row is highlighted in blue. At the bottom of the window, there are controls for Page size (25), checkboxes for 'Start with Windows' and 'Automatic Refresh', and buttons for Refresh, Details, Settings, Close, and Exit. The status bar at the bottom left says 'Ready' and the bottom right says 'Connected'.

DataMart Name	Priority	Due Date	Request ID	Created By	Request Name	Status	Request Time	Response Time	Response By
LPP - Atlanta Au...	Low	9/24/2012	487	MSullivan	Prev. Pharmacy	Completed	9/21/2012 9:49	9/21/2012 9:50	
LPP - Atlanta M...	Low	9/24/2012	487	MSullivan	Prev. Pharmacy	Submitted	9/21/2012 9:45		
LPP - Boston Au...	Low	9/24/2012	487	MSullivan	Prev. Pharmacy	Submitted	9/21/2012 9:45		
LPP - Boston M...	Low	9/24/2012	487	MSullivan	Prev. Pharmacy	Submitted	9/21/2012 9:45		
LPP - India Man...	Low	9/24/2012	487	MSullivan	Prev. Pharmacy	Submitted	9/21/2012 9:45		
LPP - India Auto...	Low	9/24/2012	487	MSullivan	Prev. Pharmacy	Submitted	9/21/2012 9:45		
LPP - Atlanta Au...	Low		486	ddes	Inc. Pharmacy	Submitted	9/21/2012 9:47		
LPP - Atlanta M...	Low		486	ddes	Inc. Pharmacy	Submitted	9/21/2012 9:47		
LPP - Boston Au...	Low		486	ddes	Inc. Pharmacy	Submitted	9/21/2012 9:47		
LPP - Boston M...	Low		486	ddes	Inc. Pharmacy	Submitted	9/21/2012 9:47		
LPP - India Man...	Low		486	ddes	Inc. Pharmacy	Submitted	9/21/2012 9:47		
LPP - India Auto...	Low		486	ddes	Inc. Pharmacy	Submitted	9/21/2012 9:47		
LPP - Boston Au...	Low	9/24/2012	483	MSullivan	ICD-9 Diagnose	Completed	9/21/2012 9:20	9/21/2012 9:21	
LPP - Boston M...	Low	9/24/2012	483	MSullivan	ICD-9 Diagnose	Submitted	9/21/2012 9:20		
LPP - India Man...	Low	9/24/2012	483	MSullivan	ICD-9 Diagnose	Submitted	9/21/2012 9:20		

The request list displays the status of all queries across all Networks and DataMarts for which you are a DataMart Administrator. If you are connected to multiple PopMedNet networks, there will be multiple tabs at the top of the application allowing you to navigate each network to see its requests.

The request list may be refreshed automatically based on a timer by checking the “Automatic Refresh” control at the bottom of the window. Users can update on demand by clicking the “Refresh” button.

The user can adjust the number of requests displayed on a page via the “Page size” control in the lower left. On the lower right, there is a pages control to advance to the first, last, next, and previous pages.


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 Request List is refreshed automatically.

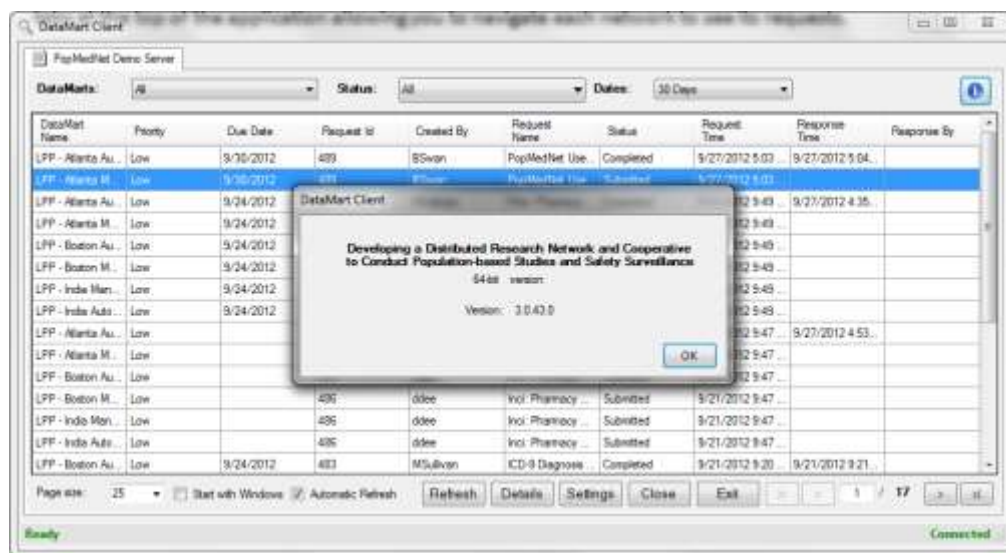
The “Settings” button will display the Network Settings dialog allowing the user to modify their network or DataMart settings.

The DataMart Client application can be started at Windows startup by checking the “Start with Windows” control.

There is a status panel along the bottom of the application that displays connection and status information for the application.

The user may completely exit and unload the program by clicking the “Exit” button. Clicking the “Close” button will cause the program to minimize itself and stay running. Launching the program again will restore the main request view. Additionally, clicking the DataMart Client icon in the system tray control will also restore the window.

Lastly, clicking the information control icon  will display the application “About” popup dialog that displays the version number that is installed and running.



5.1.1 Filtering Options

Use the drop-down controls at the top of the screen or you may click on any column title to sort your list of queries (e.g., DataMart Name, Created By, Request Time, Status and Response Time). You can filter by the following:

Option	Description
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.
Date	Go to File > Filter (or Ctrl + F). You can choose to filter the query list by preset time periods or by custom dates.

5.1.1.1 Query Status

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

Note: Running a query does not change the query’s status.

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	<p>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 5.3 ▲</p> <p><u>Holding Queries</u></p> <p><u>Holding Queries</u>. After further review, you may upload the queries you hold that are Awaiting Approval.</p>
Rejected	<p>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 5.4 <u>Rejecting Queries</u> <u>Rejecting Queries</u>. Rejecting a query ends the life of the query submitted to that DataMart.</p>
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	The query has been received by the DataMart but requires approval by the Group DataMart Administrator, if applicable. All results uploaded by DataMarts that are part of the Group's organizations require this approval. The uploaded results are withheld from the Investigator unless approved by the Group

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Approval	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 Error! Reference source not found. Error! Reference source not found.
Failed	The query encountered errors while processing or failed to upload results.

5.1.2 Viewing Query Details

Highlight an entry in the list and click the “Details” button to open the Request Detail view. You can also double-click an entry in the list.

DataMart Client - Request Detail

Network: PopMedNet Demo Server DataMart: LPP - Atlanta Manual DM Request Time: 03/21/2012 09:49 AM

Request Id: 123 Request Name: Prev: Pharmacy Dispensing by Status: Submitted

Submitted By: MSullivan Email: msullivan@lincolnpeak.com

Priority: Low Due Date: 3/24/2012 Activity:

Activity Desc:

Submitted To: LPP - Atlanta Auto DM, LPP - Atlanta Manual DM, LPP - Boston Auto DM, LPP - Boston Manual DM, LPP - India Manual DM, LPP - India Auto

Description:

Note:

Request ☐ File View

```
(Select EnrollmentData.AgeGroup,EnrollmentData.Sex,EnrollmentData.Year as
Period,DrugClass,Dispensing.Members,DaysSupply,EnrollmentData.EnrollmentMembers as [Total Enrollment in Strata
(Members)],EnrollmentData.TotalDaysCovered As [Days Covered],round(SummaryData.Members / EnrollmentData.EnrollmentMembers * 1000, 1) as
[Prevalence Rate (Users per 1000 enrollees)],round(SummaryData.Dispensing / EnrollmentData.EnrollmentMembers * 1000, 1) as [Dispensing Rate
(Dispensing per 1000 enrollees)],round(SummaryData.DaysSupply / SummaryData.Dispensing, 1) as [Days Per Dispensing],round
(SummaryData.DaysSupply / SummaryData.Members, 1) as [Days Per user] From ( Select AgeGroup, gender as Sex, Year, Sum(Member) as
EnrollmentMembers, Sum(DaysCovered) As TotalDaysCovered From ( SELECT strat10_name as AgeGroup, strat10_sort_order as AgeGroupSort, Sex
as gender, Year, DrugCov, MedCov, Members as Member, DaysCovered FROM Enrollment.tbl INNER JOIN Age_Groups ag ON (ag.id =
```

Response ☐ File View

Run Hold Reject Add File Delete File Export Results Upload Results Close

5.1.2.1 Query Result Parameters

Summary Table Parameters:

- Query Category: Prevalence (Prev), Incidence, Most Frequent Utilization (MFU)

- Query Types:
 - Enrollment
 - Drug and Medical Coverage
 - Medical Coverage Only
 - Drug Coverage Only
 - All Members (which represents a the union of previous 3 coverage types)
 - HCPCS (Healthcare Common Procedure Coding System)
 - ICD 9 Diagnoses (3 Digit Codes)
 - ICD 9 Diagnoses (4 Digit Codes)
 - ICD 9 Diagnoses (5 Digit Codes)
 - ICD 9 Procedures (3 Digit Codes)
 - ICD 9 Procedures (4 Digit Codes)
 - Pharmacy Dispensings by Generic Name
 - Pharmacy Dispensings by Drug Class
 - Incident ICD 9 Diagnoses (3 Digit Codes)
 - Incident Pharmacy Dispensings by Drug Class
 - Incident Pharmacy Dispensings by Generic Name
- Sex Stratifications:
 - Female: F
 - Male: M
 - Male and Female Aggregated: All
- Age Stratifications:
 - 10 Stratifications: 0-1 years, 2-4, 5-9, 10-14, 15-18, 19-21, 22-44, 45-64, 65-74, 75+
 - 7 Stratifications: 0-4, 5-9, 10-18, 19-21, 22-44, 45-64, 65+
 - 4 Stratifications: 0-21, 22-44, 45-64, 65+
 - 2 Stratifications: Under 65, 65+
 - 0 Stratifications: 0+
- Settings (only applicable for medical queries):
 - AV: Outpatient
 - IP: Inpatient
 - ED: Emergency Department
 - AN: Any Setting
- Periods: Yearly, depending on the availability within your database. Pharmacy Dispensings queries have quarterly availability.
- Calculated Columns
 - Medical Queries: HCPCS Procedures, ICD-9 Diagnoses and Procedures
 - Total Enrollment in Strata (Members)-Total count includes members with both medical and drug coverage plus those with medical coverage only.
 - Days covered
 - Prevalence Rates (Users per 1000 enrollees)
 - Event Rate (Events per 1000 enrollees)

- Events per Member
- Drug Queries: Pharmacy Dispensings by Generic Name and Drug Class
 - Total Enrollment in Strata (Members)- Total count includes members with both medical and drug coverage plus those with drug coverage only.
 - Days Covered
 - Prevalence Rates (Users per 1000 enrollees)
 - Dispensing Rate (Dispensings per 1000 enrollees)
 - Days per Dispensing
 - Days per user

ESP Query Parameters

- ICD-9 Diagnosis
- Reportable Disease
 - Sex Stratifications:
 - Female: F
 - Male: M
 - Male and Female Aggregated: All
 - Observation Period Range
 - Start Date to End Date (selected by user)
 - Age Range
 - Minimum Age to Maximum Age
 - Race Selector
 - Unknown
 - American Indian or Alaskan Native
 - Black or African American
 - Native Hawaiian or Other Pacific Islander
 - White

5.2 Executing and Uploading Queries

You can execute a query by clicking the “Run” button in the Request Detail view. This action will pull the query from the Portal to run against your selected data source. Results will be displayed in the Response window as shown below.

DataMart Client - Request Detail

Network: PopMedNet Demo Server DataMart: LPP - Atlanta Manual DM Request Time: 09/21/2012 09:49 AM

Request Id: 487 Request Name: Prev. Pharmacy Dispensings by Status: AwaitingResponseApproval

Submitted By: MSullivan Email: msullivan@lincolnspeak.com

Priority: Low Due Date: 9/24/2012 Activity:

Activity Desc:

Submitted To: LPP - Atlanta Auto DM, LPP - Atlanta Manual DM, LPP - Boston Auto DM, LPP - Boston Manual DM, LPP - India Manual DM, LPP - India Auto

Description:

Note:

Request ☐ File View

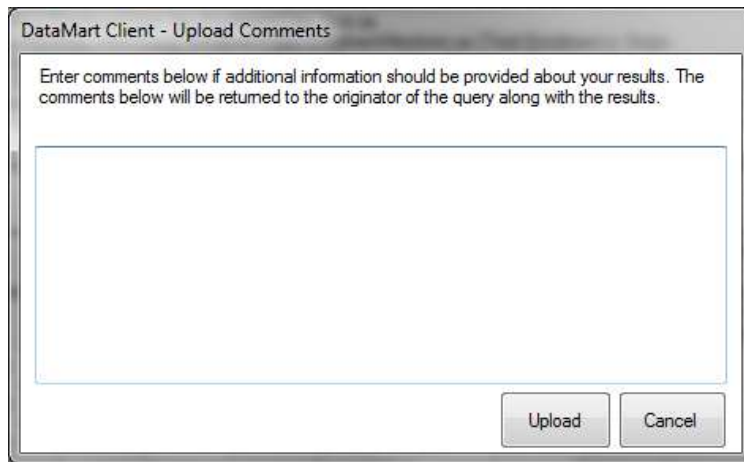
(Select EnrollmentData.AgeGroup, EnrollmentData.Sex, EnrollmentData.Year as
Period, DrugClass, Dispensings.Members, DaysSupply, EnrollmentData.EnrollmentMembers as [Total Enrollment in Strata
(Members)], EnrollmentData.TotalDaysCovered As [Days Covered], round(SummaryData.Members / EnrollmentData.EnrollmentMembers * 1000, 1) as
(Prevalence Rate (Users per 1000 enrollees)), round(SummaryData.Dispensings / EnrollmentData.EnrollmentMembers * 1000, 1) as [Dispensing Rate
(Dispensings per 1000 enrollees)], round(SummaryData.DaysSupply / SummaryData.Dispensings, 1) as [Days Per Dispensing], round
(SummaryData.DaysSupply / SummaryData.Members, 1) as [Days Per user] From (Select AgeGroup, gender as Sex, Year, Sum(Member) as
EnrollmentMembers, Sum(DaysCovered) As TotalDaysCovered From (SELECT strat10_name as AgeGroup, strat10_sort_order as AgeGroupSort, Sex
as gender, Year, DrugCov, MedCov, Members as Member, DaysCovered FROM Enrollment.tbl INNER JOIN Age_Groups ag ON (ag.id =

Response ☐ File View

AgeGroup	Sex	Period	DrugClass	Dispensing	Members	DaysSupp	Total Enrollment in Strata(Me	Days Covered	Prevalenc Rate (Users per 1000 enrollees)	Dispensin Rate (Dispensin per 1000 enrollees)	Days Per Dispensin	Days Per user
0-1	F	2002					453	110551				
0-1	F	2003					670	167824				
0-1	F	2004					999	250662				
0-1	F	2005					1180	287589				
0-1	F	2006					1290	317564				
0-1	F	2007					2214	545469				
0-1	F	2008					4113	934650				
0-1	F	2009					3678	793517				
0-1	F	2010					1842	146537				
0-1	M	2002					467	117370				
0-1	M	2003					729	170985				
0-1	M	2004					1051	262902				

Run Hold Reject Add File Delete File Export Results Upload Results Close

Click on the “Upload Results” button to upload the results of the query to the Portal. You may leave a comment, as seen in the screenshot below, if you would like to provide additional information with your results. The query requestor will see these comments along with the results on the Portal.



In the case of multiple DataMart Administrators for one DataMart, the 'Upload Results' button will grey out once one DataMart Administrator uploads results. After results have been uploaded, you may still review the results that have been uploaded by clicking Run Query. However, you will not have the option to upload the results again.

5.3 Holding Queries

You can put a query on hold to notify the requestor that you have received/executed the query but have not yet uploaded results for it. To do this, click Hold in the Request Detail view and include comments, if necessary. The query status on the Portal will change from submitted to "Awaiting Approval" and any comments will be sent to the requestor. Depending on the approval, you may then upload results or reject the query.

5.4 Rejecting Queries

Queries can be rejected before or after execution. To reject a query, click Reject in the Request 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.

6 File Distribution

The File Distribution screen allows distribution of any type of file to the network DataMarts. These requests 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 Request Details page in the DataMart Client program. You can then download and process it as desired.

DataMart Client - Request Detail

Network: PopMedNet Demo Server DataMart: LPP - Atlanta Manual DM Request Time: 03/27/2012 05:03 PM

Request Id: 003 Request Name: PopMedNet User Manuals Status: Submitted

Submitted By: BSwan Email: bswan@lincolnpeak.com

Priority: Low Due Date: 3/30/2012 Activity:

Activity Desc:

Submitted To: LPP - Atlanta Auto DM, LPP - Atlanta Manual DM

Description:

Note:

Request ☒ File View

File	DocumentId	Mime Type	Size	IsViewable
PopMedNet Overview and...	1870	application/octet-stream	12582912	<input checked="" type="checkbox"/>
DataMart Administrator M...	1871	application/octet-stream	2097152	<input checked="" type="checkbox"/>

Response ☒ File View

File	DocumentId	Mime Type	Size	IsViewable
------	------------	-----------	------	------------

Run Hold Reject Add File Delete File Export Results... Upload Results Close

7 Administering Your DataMart

As the DataMart Administrator you can perform several tasks on your network's 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 report of the DataMart
- Submit queries to your own DataMart

7.1 Creating and Viewing Your DataMart

There are a set of access rights that determine whether users can view, create, edit, and delete DataMarts. These rights may be applied at the global level, within the DataMart's organization detail page, or in the DataMart detail page.

The following figure shows the global access rights to manage DataMarts for the entire network:

The screenshot displays the 'Global Permissions' section of the PopMedNet Distributed Query Tool DataMart Administrator. The interface includes a navigation bar at the top with links for Home, Requests, Profile, Resources, and Network. A welcome message for 'systemadministrator' is visible in the top right corner. The main content area is divided into several sections: Global Permissions, Default Organization Permissions, Default Group Permissions, Default DataMart Permissions, Default User Permissions, Default Request Permissions, and Default Request Type Permissions. The 'Global Permissions' section is currently active, showing a table of permissions for various subjects. The table has columns for Subject, Right, Allow, and Deny. The subjects listed are 'HPHC Operation Center\Administrators', 'HPHC Operation Center\Everyone', and 'Jeff's Demo Org\EnhancedInvestigators'. The rights listed include 'Manage Access', 'Skip Two DataMart Rule', 'Login', 'List Requests', 'List Users', 'List DataMarts', 'List Organizations', 'List Security Groups', 'List Org Groups', 'Create Organizations', 'Create Groups', 'Run Events Log Report', and 'Event: New DataMart Client Version is Available'. The 'List DataMarts' right is highlighted with a red box. The 'Default DataMart Permissions' section is also visible below, showing a similar table of permissions for various subjects, with 'Request Metadata Update' and 'Event: DataMart Change' highlighted with a red box. A 'Save' button is located at the bottom right of the interface.

Subject	Right	Allow	Deny
[remove] HPHC Operation Center\Administrators	Manage Access	<input checked="" type="checkbox"/>	<input type="checkbox"/>
[remove] HPHC Operation Center\Everyone	Skip Two DataMart Rule	<input type="checkbox"/>	<input type="checkbox"/>
[remove] Jeff's Demo Org\EnhancedInvestigators	Login	<input type="checkbox"/>	<input type="checkbox"/>
	List Requests	<input type="checkbox"/>	<input type="checkbox"/>
	List Users	<input type="checkbox"/>	<input type="checkbox"/>
	List DataMarts	<input checked="" type="checkbox"/>	<input type="checkbox"/>
	List Organizations	<input type="checkbox"/>	<input type="checkbox"/>
	List Security Groups	<input type="checkbox"/>	<input type="checkbox"/>
	List Org Groups	<input checked="" type="checkbox"/>	<input type="checkbox"/>
	Create Organizations	<input checked="" type="checkbox"/>	<input type="checkbox"/>
	Create Groups	<input checked="" type="checkbox"/>	<input type="checkbox"/>
	Run Events Log Report	<input type="checkbox"/>	<input type="checkbox"/>
	Event: New DataMart Client Version is Available	<input checked="" type="checkbox"/>	<input type="checkbox"/>

Before anyone can create a DataMart, the “Create DataMarts” access right in the Access Control panel of the Organization that will own the DataMart needs to be granted to administrators.

Organization Information

Name: LPP - Atlanta Acronym: LPP-ATLX Parent: Lincoln Peak [x]

Access Control

Subject	Right	Allow	Deny
[removed] HPNC Operation Center/Administrators	Manage Access	<input checked="" type="checkbox"/>	<input type="checkbox"/>
[removed] HPNC Operation Center/Everyone	Edit	<input checked="" type="checkbox"/>	<input type="checkbox"/>
[removed] Lincoln Peak/Administrators	Delete	<input checked="" type="checkbox"/>	<input type="checkbox"/>
[removed] Lincoln Peak/Observers	Read	<input type="checkbox"/>	<input type="checkbox"/>
[removed] LPP - Atlanta/Administrators	Create Users	<input checked="" type="checkbox"/>	<input type="checkbox"/>
[removed] LPP - Atlanta/Everyone	Create DataMarts	<input checked="" type="checkbox"/>	<input type="checkbox"/>
[removed] LPP - Atlanta/Observers	Event: New Request Submitted	<input checked="" type="checkbox"/>	<input type="checkbox"/>
	Event: Organization Change	<input checked="" type="checkbox"/>	<input type="checkbox"/>

Add...

Default DataMart ACL

Default Request ACL

Default User ACL

Users

DataMarts

Security Groups

Save Cancel Delete

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A DataMart may be created by clicking the Create DataMart button in the owning organization’s detail page or by navigating to the list of all DataMarts via Network/DataMarts menu as shown in the following figures:

The screenshot displays the PopMedNet DataMart Administrator web application. The interface includes a top navigation bar with the PopMedNet logo, the title 'Distributed Research Network Technologies for Population Medicine', a user greeting 'Welcome, systemadministrator', and navigation links for Home, Requests, Profile, Resources, Network, Contact Us, and Logout. The main content area is divided into several sections, each with a checkbox and a title: 'Organization Information', 'Access Control', 'Default DataMart ACL', 'Default Request ACL', 'Default User ACL', 'Users', 'DataMarts', and 'Security Groups'. The 'Organization Information' section is currently active, showing input fields for 'Name' (LPP - Atlanta), 'Acronym' (LPP-ATL), and 'Parent' (Lincoln Peak |al). Below these fields are sections for 'Access Control', 'Default DataMart ACL', 'Default Request ACL', 'Default User ACL', 'Users', and 'DataMarts'. The 'DataMarts' section contains a table with two rows: 'LPP - Atlanta Auto DM' and 'LPP - Atlanta Manual DM'. An 'Add DataMart' button is located at the bottom right of the 'DataMarts' section. At the bottom of the page, there are 'Save', 'Cancel', and 'Delete' buttons, and a footer with version information, terms and conditions, and the Lincoln Peak logo.

Name
LPP - Atlanta Auto DM
LPP - Atlanta Manual DM

Buttons: Save, Cancel, Delete

Footer: Version 3.0.2.9 | Terms and Conditions | Info | © 2012 PopMedNet, All Rights Reserved. LINCOLN PEAK

Once created, the DataMart is configured by entering a DataMart name, acronym, and parent organization that owns the DataMart, along with other information, such as contact information, that is visible to users who navigate to it via the Portal.

DataMart Info

Name: LPP - Atlanta Manual DM Organization: LPP - Atlanta Contact First Name: Bruce

Contact Last Name: Contact Phone: Contact Email:

Special Requirements:

Usage Restrictions:

Health Plan Description:

Installed Models

Model	Last Metadata Request	Last Metadata Response
ESP Query Builder	N/A	N/A
File Distribution	N/A	N/A
Summary: Prevalence Queries	N/A	N/A
Summary: Incidence Queries	N/A	N/A
Summary: Most Frequently Used Queries	N/A	N/A

Install Cancel

Access Control

Downloads

[Download DataMart Client 32-bit version](#)
[Download DataMart Client 64-bit version](#)
[Download Sample Database for Summary requests](#)

Save Cancel Delete

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7.2 Managing Access to Your DataMart and Requests

Once the DataMart is created, the Network Administrator sets the Access Control rights to allow administrators to modify the DataMart and set rights that control access to requests that may be routed to the DataMart. Depending on the needs and governance of the users of the DataMart, Access Control rights can be very restrictive or broadly applied.

7.2.1 Installing Request Models

Each DataMart may support one or more of the deployed Request Models. A Request Model contains one or more request types that may be composed and routed to one or more DataMarts for execution. If a DataMart supports a plugin model, then it must be installed by clicking the “Install ...” button before configuring access to its requests against the given DataMart.

Before installing models, the Network Administrator must grant you the rights to install or uninstall request model plugins that are supported by your DataMart.

The screenshot shows the PopMedNet DataMart Administrator interface. The top navigation bar includes links for Home, Requests, Profile, Resources, and Network. The main content area is divided into several sections:

- DataMart Info:** Contains fields for Name (LPP - Atlanta Manual DM), Description (LPP - Atlanta), Contact First Name (Bruce), Contact Last Name, Contact Phone, Contact Email, Special Requirements, Usage Restrictions, and Health Plan Description.
- Installed Models:** A section for managing installed models.
- Access Control:** A table listing subjects and their associated rights. The table has columns for Subject, Right, Allow, Deny, and Date. The 'LPP - Atlanta/Administrators' row is highlighted, and the 'Install Models' and 'Uninstall Models' rights are checked under the 'Allow' column.
- Downloads:** A section for downloading DataMart Client 32-bit version, DataMart Client 64-bit version, and Sample Database for Summary requests.

At the bottom of the interface, there are buttons for Save, Cancel, and Delete, and a footer with version information (Version 3.0.29) and copyright notice (© 2012 PopMedNet, All Rights Reserved).

Subject	Right	Allow	Deny	Date
[removed] HPHC Operation Center/Administrators	Manage Access	<input type="checkbox"/>	<input type="checkbox"/>	[inherited]
[removed] HPHC Operation Center/DataMartAdministrator	Edit	<input type="checkbox"/>	<input type="checkbox"/>	[inherited]
[removed] HPHC Operation Center/Everyone	Delete	<input type="checkbox"/>	<input type="checkbox"/>	[inherited]
[removed] Jeff's Demo Org/Investigators	Read	<input type="checkbox"/>	<input type="checkbox"/>	
[removed] Lincoln Peak/Administrators	Request Metadata Update	<input type="checkbox"/>	<input type="checkbox"/>	
[removed] Lincoln Peak/DataMartAdministrators	See Request Queue	<input type="checkbox"/>	<input type="checkbox"/>	
[removed] Lincoln Peak/Everyone	Upload Results	<input type="checkbox"/>	<input type="checkbox"/>	
[removed] Lincoln Peak/Investigators	Hold Requests	<input type="checkbox"/>	<input type="checkbox"/>	
[removed] Lincoln Peak/QueryAdministrators	Reject Requests	<input type="checkbox"/>	<input type="checkbox"/>	
[removed] Lincoln Peak/ResponseAdministrators	Install Models	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
[removed] LPP - Atlanta/Administrators	Uninstall Models	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
[removed] LPP - Atlanta/DataMartAdministrators	Run Audit Report	<input type="checkbox"/>	<input type="checkbox"/>	[inherited]
[removed] LPP - Atlanta/Everyone	Approve/Reject Responses	<input type="checkbox"/>	<input type="checkbox"/>	
	Skip Response Approval	<input type="checkbox"/>	<input type="checkbox"/>	
	Group/Ungroup Responses	<input type="checkbox"/>	<input type="checkbox"/>	
	File Distribution	<input type="checkbox"/>	<input type="checkbox"/>	

The following figure shows an example of request models that have been installed for a DataMart.

The screenshot displays the PopMedNet Distributed Query Tool DataMart Administrator interface. The top navigation bar includes links for Home, Requests, Profile, Resources, and Network. The user is logged in as 'systemadministrator'.

The main content area is divided into several sections:

- DataMart Info:** Contains fields for Name (LPP - Atlanta Manual DM), Description (LPP - Atlanta), Contact First Name (Bruce), Contact Last Name, Contact Phone, Contact Email, Special Requirements, Usage Restrictions, and Health Plan Description.
- Installed Models:** A table listing installed models with columns for Model, Last Metadata Request, and Last Metadata Response. The table includes checkboxes for each model and buttons for 'Install' and 'Uninstall'.
- Access Control:** A section for managing user access.
- Downloads:** A section with links to download DataMart Client 32-bit version, DataMart Client 64-bit version, and Sample Database for Summary requests.

At the bottom, there are 'Save', 'Cancel', and 'Delete' buttons, along with version information (Version 3.0.29) and copyright notice (© 2012 PopMedNet, All Rights Reserved).

Model	Last Metadata Request	Last Metadata Response
ESP Query Builder	N/A	N/A
File Distribution	N/A	N/A
Summary: Prevalence Queries	N/A	N/A
Summary: Incidence Queries	N/A	N/A
Summary: Most Frequently Used Queries	N/A	N/A

7.2.2 Granting Access to Administer a DataMart

DataMarts may be administered by one or more users, referred to as DataMart Administrators. The following figure shows the access rights that need to be granted to allow a user or group of users the ability to administer the DataMart.

PopMedNet Distributed Research Network Technologies for Population Medicine

Welcome, systemadministrator

Home Requests Profile Resources Network Contact Us Logout

DataMart Info

Name: LPP - Atlanta Manual DM

Organization: LPP - Atlanta

Contact Peak Name: Bruce

Contact Last Name: Contact First Name: Contact Email:

Swat:

Special Requirements:

Usage Description:

Health Plan Description:

Installed Models

Model	Last Metadata Request	Last Metadata Response
File Distribution	N/A	N/A
Summary: Most Frequently Used Queries	N/A	N/A

Install Uninstall

Access Control

Subject	Right	Allow	Deny
Install HPHC Operation Center/Administrators	Manage Access	<input type="checkbox"/>	<input type="checkbox"/>
Install HPHC Operation Center/DataMart/Administrators	Edit	<input type="checkbox"/>	<input type="checkbox"/>
Install HPHC Operation Center/Everyone	Delete	<input type="checkbox"/>	<input type="checkbox"/>
Install Jeff's Demo Org/Investigators	Read	<input type="checkbox"/>	<input type="checkbox"/>
Install Lincoln Peak/Administrators	Request Metadata Update	<input type="checkbox"/>	<input type="checkbox"/>
Install Lincoln Peak/DataMart/Administrators	See Request Queue	<input type="checkbox"/>	<input type="checkbox"/>
Install Lincoln Peak/Everyone	Upload Results	<input type="checkbox"/>	<input type="checkbox"/>
Install Lincoln Peak/Investigators	Hold Requests	<input type="checkbox"/>	<input type="checkbox"/>
Install Lincoln Peak/Query/Administrators	Reject Requests	<input type="checkbox"/>	<input type="checkbox"/>
Install Lincoln Peak/Responses/Administrators	Install Models	<input type="checkbox"/>	<input type="checkbox"/>
Install LPP - Atlanta/Administrators	Uninstall Models	<input type="checkbox"/>	<input type="checkbox"/>
Install LPP - Atlanta/DataMart/Administrators	Run Audit Report	<input type="checkbox"/>	<input type="checkbox"/>
Install LPP - Atlanta/Everyone	Approve/Reject Responses	<input type="checkbox"/>	<input type="checkbox"/>
	Skip Response Approval	<input type="checkbox"/>	<input type="checkbox"/>
	Group/Ingroup Responses	<input type="checkbox"/>	<input type="checkbox"/>
	File Distribution	<input type="checkbox"/>	<input type="checkbox"/>
	Metadata: Refresh Dates	<input type="checkbox"/>	<input type="checkbox"/>
	MFU: HCPCS Procedures	<input type="checkbox"/>	<input type="checkbox"/>
	MFU: ICD-9 Diagnoses (3 digit codes)	<input type="checkbox"/>	<input type="checkbox"/>
	MFU: ICD-9 Diagnoses (4 digit codes)	<input type="checkbox"/>	<input type="checkbox"/>
	MFU: ICD-9 Diagnoses (5 digit codes)	<input type="checkbox"/>	<input type="checkbox"/>
	MFU: ICD-9 Procedures (3 digit codes)	<input type="checkbox"/>	<input type="checkbox"/>
	MFU: ICD-9 Procedures (4 digit codes)	<input type="checkbox"/>	<input type="checkbox"/>
	MFU: Pharmacy Dispensings by Drug Class	<input type="checkbox"/>	<input type="checkbox"/>
	MFU: Pharmacy Dispensings by Generic Name	<input type="checkbox"/>	<input type="checkbox"/>

Add

Downloads

[Download DataMart Client 32-bit version](#)

[Download DataMart Client 64-bit version](#)

[Download Sample Database for Summary requests](#)

OK Cancel Delete

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As shown in the figure, the DataMartAdministrators group is granted the right to view the request queue in the DataMart client application, execute the request, approve or reject it, and upload responses to the request. Additionally, the group has been granted access to run Audit Reports against the DataMart and to issue test queries to themselves without requiring approval.

7.2.3 Granting Access to Route Requests to Your DataMart

Once the request model is installed, the access rights to route the request to the DataMart become visible in the Request Access Control List (ACL) panel allowing the administrator to grant access to route them to the DataMart for execution. The following figure shows granting access to the MFU Summary Queries to a group of Investigators:

PopMedNet Distributed Research Network Technologies for Population Medicine

Welcome, systemadministrator

Home Requests Profile Resources Network Contact Us Logout

DataMart Info

Name: LPP - Atlanta Manual DM Description: LPP - Atlanta Contact First Name: Bruce

Contact Last Name: Contact Phone: Contact Email:

Days:

Special Requirements:

Usage Description:

Health Map Description:

Installed Models

Model	Last Metadata Request	Last Metadata Response
<input type="checkbox"/> File Distribution	N/A	N/A
<input type="checkbox"/> Summary: Most Frequently Used Queries	N/A	N/A

Install Uninstall

Access Control

Subject	Right	Allow	Deny
<input type="checkbox"/> HPHC Operation Center/Administrators	Manage Access	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/> HPHC Operation Center/DataMart/Administrators	Edit	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/> HPHC Operation Center/Everyone	Delete	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/> Jeff's Demo Org/Investigators	Read	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/> Lincoln Peak/Administrators	Request Metadata Update	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/> Lincoln Peak/DataMart/Administrators	See Request Queue	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/> Lincoln Peak/Everyone	Upload Results	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/> Lincoln Peak/Investigators	Hold Requests	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/> Lincoln Peak/Query/Administrators	Reject Requests	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/> Lincoln Peak/Responses/Administrators	Install Models	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/> LPP - Atlanta/Administrators	Uninstall Models	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/> LPP - Atlanta/DataMart/Administrators	Run Audit Report	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/> LPP - Atlanta/Everyone	Approve/Reject Responses	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/> Add...	Skip Response Approval	<input type="checkbox"/>	<input type="checkbox"/>
	Group/Ungroup Responses	<input type="checkbox"/>	<input type="checkbox"/>
	File Distribution	<input type="checkbox"/>	<input type="checkbox"/>
	Metadata: Refresh Data	<input type="checkbox"/>	<input type="checkbox"/>
	MFU: HCPCS Procedures	<input type="checkbox"/>	<input type="checkbox"/>
	MFU: ICD-9 Diagnoses (3 digit codes)	<input type="checkbox"/>	<input type="checkbox"/>
	MFU: ICD-9 Diagnoses (4 digit codes)	<input type="checkbox"/>	<input type="checkbox"/>
	MFU: ICD-9 Diagnoses (5 digit codes)	<input type="checkbox"/>	<input type="checkbox"/>
	MFU: ICD-9 Procedures (3 digit codes)	<input type="checkbox"/>	<input type="checkbox"/>
	MFU: ICD-9 Procedures (4 digit codes)	<input type="checkbox"/>	<input type="checkbox"/>
	MFU: Pharmacy Dispensings by Drug Class	<input type="checkbox"/>	<input type="checkbox"/>
	MFU: Pharmacy Dispensings by Generic Name	<input type="checkbox"/>	<input type="checkbox"/>

Downloads

[Download DataMart Client 32-bit version](#)

[Download DataMart Client 64-bit version](#)

[Download Sample Databases for Summary requests](#)

Save Cancel Delete

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Once these rights have been set, your DataMart will become available for users to start routing requests to your DataMart.

7.3 Creating an Audit Report for Your DataMart

The Audit Report allows you to view all the activity that has been requested from any of your DataMarts. Administrators may run an Audit Report for their DataMart in the Portal by navigating to Reports/DataMart Audit Report.

The screenshot shows the 'DataMart Audit Report' form within the PopMedNet portal. The form has a header bar with the PopMedNet logo and navigation links: Home, Requests, Profile, Resources, Reports, and Network. A user greeting 'Welcome, Edward' and links for 'Contact Us' and 'Logout' are on the right. The main form area is titled 'DataMart Audit Report' and contains four input fields: 'Start Date' (04/01/2012), 'End Date' (09/26/2012), 'DataMart' (a dropdown menu showing 'PP - Atlanta Manual DM'), and 'Order By' (a dropdown menu showing 'Date Submitted'). A 'Create Report' button is located to the right of these fields. At the bottom of the page, there is a footer with 'Version 3.0-25', 'Terms and Conditions', 'Info', '© 2012 PopMedNet. All Rights Reserved.', and the 'LINCOLN PEAK' logo.

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. The following figure shows a sample report.

DataMart Audit Report: LPP - Atlanta Manual DM

Time Period Covered: 07/26/2012 - 09/25/2012

Date Report Created: 09/28/2012

ID	Request Name	Model	Request Type	Created On	Submitted On	Submitted By	Status	Open Days
2	MFU Pharmacy Dependencies by Drug Class - 0	Summary: Most Frequently Used Queries	MFU Pharmacy Dependencies by Drug Class	07/26/2012 11:23 AM	07/26/2012 11:23 AM	BSwain	Canceled	63
3	MFU Pharmacy Dependencies by Generic Name - 0	Summary: Most Frequently Used Queries	MFU Pharmacy Dependencies by Generic Name	07/26/2012 11:31 AM	07/26/2012 11:32 AM	BSwain	Completed	63
4	MFU ICD-9 Procedures (4 digit codes) - 0	Summary: Most Frequently Used Queries	MFU ICD-9 Procedures (4 digit codes)	07/26/2012 01:46 PM	07/26/2012 01:46 PM	BSwain	Completed	63
6	Reportable Disease - 0 (Copy)	ESP Query Builder	Reportable Disease	07/26/2012 02:33 PM	07/26/2012 02:33 PM	systemadministrator	AwaitingRequestApproval	63
7	ICD-9 Diagnosis - 0	ESP Query Builder	ICD-9 Diagnosis	07/26/2012 03:04 PM	07/26/2012 03:05 PM	BSwain	PendingUpload	63
9	ICD-9 Diagnosis - 1 (Copy)	ESP Query Builder	ICD-9 Diagnosis	07/26/2012 04:37 PM	07/26/2012 04:37 PM	MSullivan	Completed	63
10	ICD-9 Diagnosis - 3	ESP Query Builder	ICD-9 Diagnosis	07/26/2012 05:53 PM	07/26/2012 05:54 PM	Investigator	AwaitingRequestApproval	63
11	ICD-9 Diagnosis - 4	ESP Query Builder	ICD-9 Diagnosis	07/26/2012 06:32 PM	07/26/2012 06:33 PM	MSullivan	Completed	63
12	ICD-9 Diagnosis - 8	ESP Query Builder	ICD-9 Diagnosis	07/26/2012 06:34 PM	07/26/2012 06:35 PM	MSullivan	Completed	63
16	ICD-9 Diagnosis - 1 (Copy 2)	ESP Query Builder	ICD-9 Diagnosis	07/27/2012 09:00 AM	07/27/2012 09:00 AM	MSullivan	Completed	63
17	ICD-9 Diagnosis - 6 (Copy)	ESP Query Builder	ICD-9 Diagnosis	07/27/2012 09:00 AM	07/27/2012 09:00 AM	LPPSystemDataMartAdministrator	AwaitingResponseApproval	63
18	Reportable Disease - 0 (Copy 2)	ESP Query Builder	Reportable Disease	07/27/2012 01:16 PM	07/27/2012 01:16 PM	systemadministrator	AwaitingRequestApproval	62
19	ICD-9 Diagnosis - 1 (Copy 3)	ESP Query Builder	ICD-9 Diagnosis	07/28/2012 08:00 AM	07/28/2012 08:00 AM	MSullivan	Completed	62
20	ICD-9 Diagnosis - 6 (Copy 2)	ESP Query Builder	ICD-9 Diagnosis	07/28/2012 09:00 AM	07/28/2012 09:00 AM	LPPSystemDataMartAdministrator	AwaitingResponseApproval	62
21	Reportable Disease - 0 (Copy 3)	ESP Query Builder	Reportable Disease	07/28/2012 01:16 PM	07/28/2012 01:16 PM	systemadministrator	AwaitingRequestApproval	61
22	ICD-9 Diagnosis - 1 (Copy 4)	ESP Query Builder	ICD-9 Diagnosis	07/29/2012 08:00 AM	07/29/2012 08:00 AM	MSullivan	Completed	61
23	ICD-9 Diagnosis - 6 (Copy 3)	ESP Query Builder	ICD-9 Diagnosis	07/29/2012 09:00 AM	07/29/2012 09:00 AM	LPPSystemDataMartAdministrator	AwaitingResponseApproval	61
24	Reportable Disease - 0 (Copy 4)	ESP Query Builder	Reportable Disease	07/29/2012 01:16 PM	07/29/2012 01:16 PM	systemadministrator	AwaitingRequestApproval	60
25	ICD-9 Diagnosis - 6 (Copy 3)	ESP Query Builder	ICD-9 Diagnosis	07/29/2012 03:08 PM	07/29/2012 03:08 PM	Investigator	AwaitingRequestApproval	60
26	ICD-9 Diagnosis - 1 (Copy 5)	ESP Query Builder	ICD-9 Diagnosis	07/30/2012 08:00 AM	07/30/2012 08:00 AM	MSullivan	Completed	60
27	ICD-9 Diagnosis - 6 (Copy 4)	ESP Query Builder	ICD-9 Diagnosis	07/30/2012 09:00 AM	07/30/2012 09:00 AM	LPPSystemDataMartAdministrator	AwaitingResponseApproval	60

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 Profile menu to view your account information.

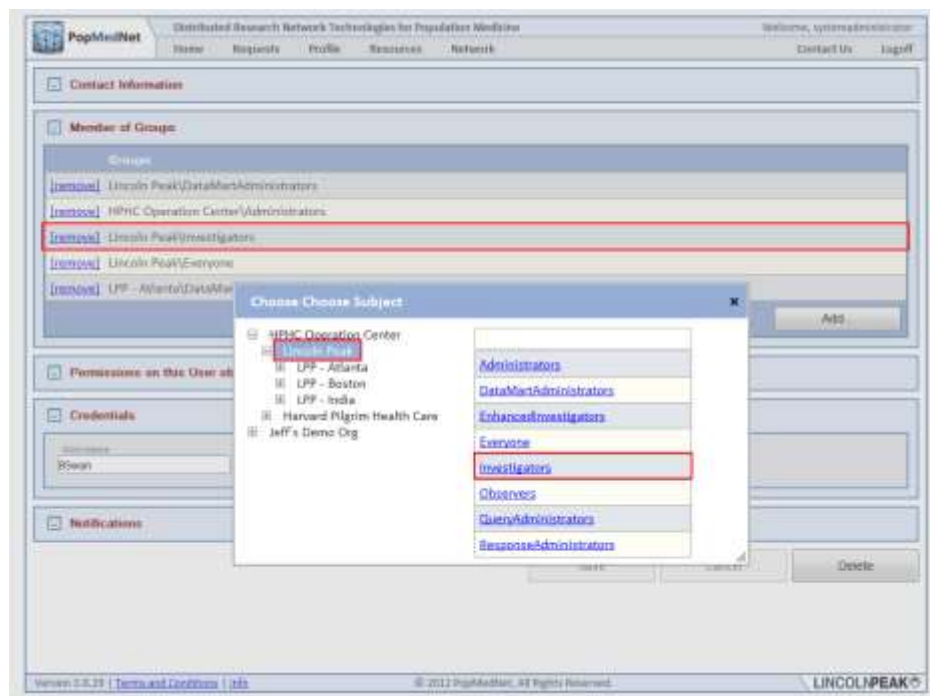
8.1 Contact Information

You can enter or update your information in the Contact Information panel.

The screenshot displays the 'Contact Information' panel within the PopMedNet web portal. The panel is titled 'Contact Information' and contains several input fields for user details. The 'First Name' field is populated with 'Diane', 'Middle Name' with 'M', and 'Last Name' with 'Swan'. The 'Title' field is empty. The 'Email' field contains 'dswan@lincolnpeak.com', 'Office' contains '770-490-1136', and 'Fax' is empty. The 'Organization' field is set to 'Lincoln Peak'. Below these fields is a 'Certificate' section showing a 'Current thumbprint' and two links: 'Upload New Certificate...' and 'Download This Certificate'. Underneath the certificate section are four expandable panels: 'Member of Groups', 'Permissions on this User object', 'Credentials', and 'Notifications'. At the bottom of the panel are three buttons: 'Save', 'Cancel', and 'Delete'. The footer of the page includes version information (Version 3.0.29), a link to 'Terms and Conditions', a copyright notice (© 2012 PopMedNet, All Rights Reserved), and the 'LINCOLN PEAK' logo.

8.2 Security Group Membership

Users belong to a single organization, but can take on multiple roles through membership in Security Groups. Administrators with access rights to manage user access control may select one or more security groups for which the user is a member. Membership grants the user all the rights in each security group. The following figure illustrates a list of groups the user is a member of along with the dialog used to add membership into existing groups.



Typically, users do not have the access rights to modify their own security profile. This right is intended for either site-wide “Root” administrators or administrators who are members of the user’s organization.

8.3 Changing your Password

The user credentials consist of a Username and Password. The username must be unique across the network. The password must be at least 9 characters long and consist of at least one number, one symbol, and at least one upper case character. Users always have the rights to modify their password at any time. Password expire periodically base on a network-wide settings described in the Network Configuration section below.

The screenshot displays the PopMedNet Distributed Query Tool DataMart Administrator interface. At the top, the header includes the PopMedNet logo, the title 'Distributed Research Network Technologies for Population Medicine', and a welcome message for 'systemadministrator'. Below the header, there are navigation tabs: Home, Requests, Profile, Resources, and Network. The 'Profile' tab is active, showing a user profile for 'systemadministrator'. The 'Credentials' section is highlighted with a red border and contains three input fields: Username (with the value 'system'), Password, and Confirm Password. Other sections visible include Contact Information, Member of Groups, Permissions on this User object, and Notifications. At the bottom, there are buttons for Save, Cancel, and Delete. The footer contains version information (Version 3.0.29), a link to Terms and Conditions, and copyright details (© 2012 PopMedNet, All Rights Reserved).

8.4 Receiving Notifications

Notification options allow the user to manage events that are triggered due to actions performed by the user or related to the user's role, such as a DataMart Administrator. Users have the option of receiving notifications immediately when they are triggered, daily, weekly, or monthly. When choosing daily, weekly, or monthly, the notifications are batched together with other notifications on the same schedule in a single email.

PopMedNet Distributed Research Network Technologies for Population Medicine
 Home Requests Profile Resources Reports Network
 Welcome, systemadministrator Contact Us Logout

Contact Information

First Name: Middle Name: Last Name: Title:
 E-mail: Phone: Fax: Organization: [Lincoln Peak](#)
 Certificate: Current thumbprint: 647888D273B809223439E451C3H73ED8C3A8232D [Upload New Certificate...](#) [Remove This Certificate](#)

Member of Groups

Permissions on this user object

Credentials

Notifications

Frequency	Event
<input checked="" type="checkbox"/> Immediately	Password Expiration Reminder
<input checked="" type="checkbox"/> Immediately	My Profile Updated
<input checked="" type="checkbox"/> Immediately	Organization Change
<input checked="" type="checkbox"/> Immediately	New DataMart Client Version is Available
<input checked="" type="checkbox"/> Immediately	Request Status Changed
<input checked="" type="checkbox"/> Daily	Results Reminder
<input checked="" type="checkbox"/> Daily	User Change

Save Cancel Delete

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Note: Once the user has chosen to receive notifications, no matter what the delivery frequency is selected; the notifications are displayed in the Notifications panel on the Home page.

8.4.1 Notification Event Reference

The following table lists each event that may be created in PopMedNet™ along with a description.

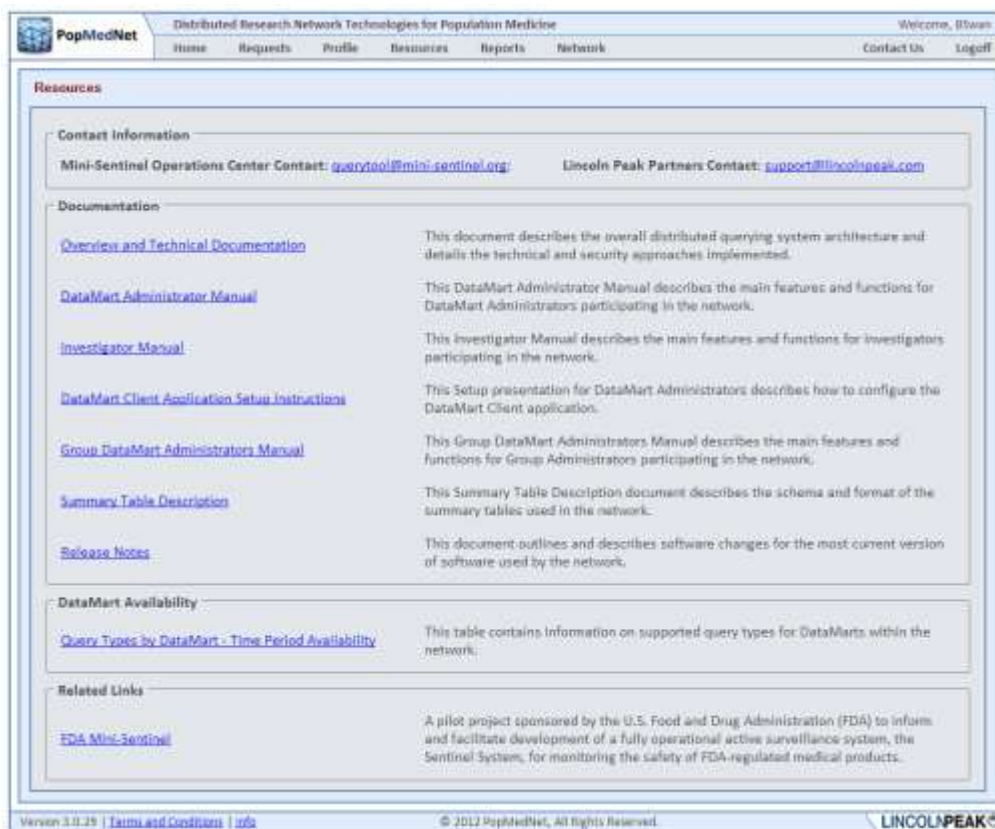
Category	Event	Description
User	Password Expiration Reminder	Notifies users when their password will be expiring
	My Profile Change	Notifies you when your user profile has changed
	User Change	Notifies you when a user has updated his/her user profile
	New User Registration Submitted	Notifies you when a new user submits their registration form for network access

	Registration Change	Notifies you when the registration status of a new user changes
Requests	New Request Submitted	Notifies you when a new request has been submitted to your DataMart and requires your action to process it
	Request Status Changed	Notifies you when your submitted request has been on placed on hold or rejected by the DataMart administrator that you submitted the query to.
	Request Reminder	Notifies you when a previously submitted request is still pending and requires your attention in order to process it
	Results Reminder	Notifies you when the DataMart administrator has accepted your query and the query results have been uploaded.
	Results Viewed	Notifies the DataMart Administrator when results are viewed on the Portal
Organization	Organization Change	Notifies you when an Organization has been added or deleted to the list of organizations that can send Queries to your DataMart
Group	Group Change	Notifies you when a group has been added or deleted to the list of groups allowed to send queries to your DataMart
DataMart	New DataMart Client Version is Available	For Datamart Administrators: Email notifications are sent to the DataMart Administrators. It alerts these administrators that the new version of the DataMart Client application is available for download.

	DataMart Change	Notifies you when a DataMart has been added or deleted to the list of groups allowed to send queries to your DataMart
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9 Getting Help

Once logged in, the Resource Tab offers helpful contact information, documentation, and related links, as seen below.



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 request additional help, contact your Network Administrator or the PopMedNet™ support staff directly.

9.1 Development and Funding Statement

The **PopMedNet™** software application was developed as part of several contracts awarded by the Agency for Healthcare Research and Quality (AHRQ) to the HMO Research Network (HMORN) Center for Education and Research on Therapeutics (CERT) DEcIDE Center housed in the Department of Population Medicine at the Harvard Pilgrim Health Care Institute (HPHCI). Additional development was funded by AHRQ under the Scalable PArtnering Network for CER: Across Lifespan, Conditions, and Settings (SPAN) project. Additional support has been provided by The Food and Drug Administration's Mini-Sentinel project (Contract No. HHSF2232009100061) and the US Department of Health and Human Services' Office of the National Coordinator for Health Information Technology (ONC) MDPHnet project.

The system was developed by Lincoln Peak Partners under the direction of HPHCI.

PopMedNet™ can accommodate a wide scope of network sizes and complexity, ranging from single datasets held by only two organizations through multi-year projects encompassing dozens of organizations and dozens of data resources. Networks powered by the PopMedNet™ application can customize and brand the network as desired. The Department of Population Medicine at the Harvard Pilgrim Health Care Institute (HPHCI) led development of the system in collaboration with Lincoln Peak Partners (LPP). Lincoln Peak Partners provides support services and secure hosting for current system users, and leads development of system enhancements.

9.2 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 Network Administrator. A user is typically associated with their employer organization. Organizations can be Data Partners (for example, Kaiser Permanente Colorado), federal agencies (for example, FDA, NIH), or affiliated institutions such as academic medical centers.

Users are individuals with various security groups and associated rights within the network.

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

Rights are mainly assigned by the Network Administrator(s). The Network Administrators can also allow certain users to assign rights within an organization or group based on the governance of the network.

Where can I get more information on the PopMedNet™?

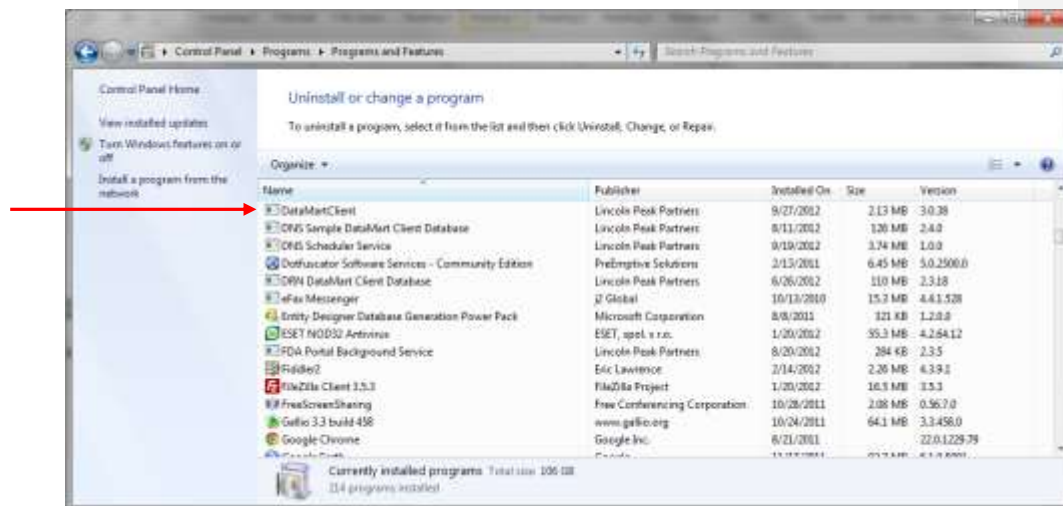
You may contact the Operations Center for more information:

Jeffrey Brown, PhD
Harvard Pilgrim Health Care Institute
Jeff_brown@hphc.org
www.popmednet.org

10 Uninstalling the DataMart Client

Use these steps to uninstall the DataMart Client:

1. Go to “Control Panel > Add / Remove Programs” or “Control Panel > Programs and Features” depending on which version of Windows you are using.
2. Double click “Data Mart Client” in the list of installed items displayed



3. Click **Yes** in the pop up dialog box, “Are you sure you want to uninstall Data Mart Client?”

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.