IBM DB2 Query Patroller

User's Guide

Version 6

SC09-2861-00

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Before using this information and the product it supports, be sure to read the general information under “Appendix. Notices” on page 51.

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Contents

About This Book

This book provides the user of the DB2 Query Patroller system with information and procedures for using the QueryEnabler and QueryMonitor client components of DB2 Query Patroller.

Who Should Use This Book

This book is intended for the users of the DB2 Query Patroller QueryMonitor and QueryEnabler utilities. These are typically users who execute queries against a data warehouse using a 32-bit ODBC query application.

This book is organized in two parts. Use the table below to help you quickly find the part of the book you are interested in:

Table 1. How the DB2 Query Patroller User's Guide is Organized

Part	Description
Part 1, QueryEnabler	This section provides information and procedures for using the QueryEnabler utility to schedule and execute queries.
Part 2, QueryMonitor	This section provides information and procedures for using the QueryMonitor utility to monitor queries that have been submitted through the DB2 Query Patroller system.

Conventions

This book uses these highlighting conventions:

- **Boldface** indicates commands or graphical user interface (GUI) controls such as names of fields, folders, icons, or menu choices.
- *Italics* indicates variables that you should replace with your own value. It is also used to indicate book titles and to emphasize words.
- `Monospace` indicates file names, directory paths, and examples of text you enter exactly as shown.

Related Documentation

For additional information about DB2 Query Patroller refer to the following documents:

- *DB2 Query Patroller Administration Guide*
- *DB2 Query Patroller Installation Guide*

Part 1. QueryEnabler

Chapter 1. Introduction to QueryEnabler

About QueryEnabler

The QueryEnabler component of DB2 Query Patroller intercepts queries from a 32-bit ODBC query application and reroutes them to the DB2 Query Patroller system before they are sent to the database. DB2 Query Patroller and the QueryEnabler then provide mechanisms for returning the query results to the query application.

Before You Get Started

The procedures in this manual assume that you have already installed QueryMonitor according to the instructions in the DB2 Query Patroller Installation Guide.

Overview of the Schedule Query Window

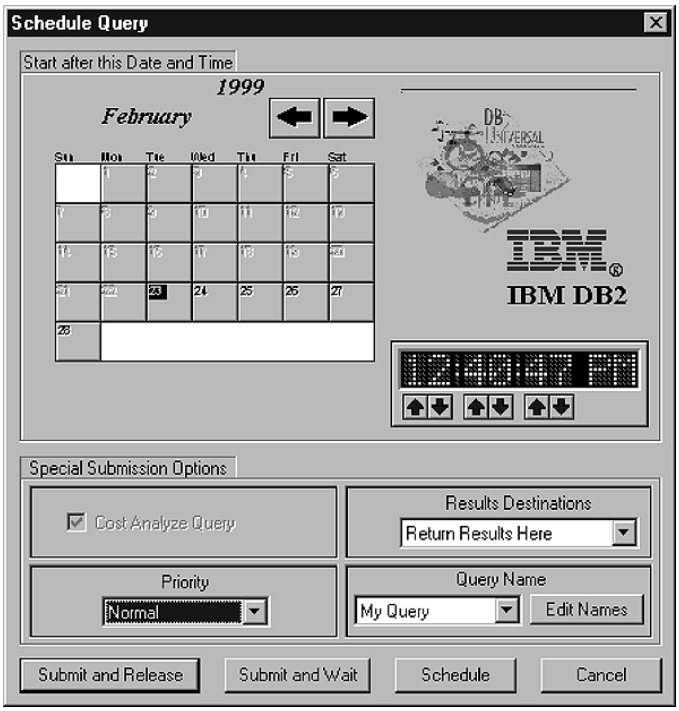
When you submit a query from your query application, the QueryEnabler responds in one of two ways:

- If the same query exists in DB2 Query Patroller's job table, it will be displayed in the Result Sets window. You can view a result set from a previous execution by selecting a query from the Result Set window or you can resubmit the same query and generate a new result set.
- If no matching queries exist in the job table, or if you select the **Submit Query** option from the Result Set window, the Schedule Query window opens. The Schedule Query window allows you to set a date and time for the query to execute.

The Schedule Query window contains three general sections: calendar, time, and special submission options. Use these sections of the Schedule Query window to set the execution date and time, and the special query options.

You can schedule a query for immediate execution, deferred execution, or as a recurring query.

The Schedule Query window is illustrated below:



The Schedule Query Window

The Schedule Query window contains the following sections:

- Calendar section
- Time section
- Special Submission Options section

Calendar Section

When the Schedule Query window opens, the current month is displayed. You can scroll through the calendar months using the arrow push buttons located above the calendar. The calendar displays the days for the specified month and year.

By default, the current date is selected. Clicking a date causes the query to be scheduled on that day. If the date clicked is before the current day, then the query is scheduled to run immediately.

Time Section

The time panel displays the hour, minute, and second that the query is scheduled to execute. When the Schedule Query window opens, the current time displays until the up and down arrows under the time display are used to set the query schedule. The time display increments by one second until you use the up and down arrows.

Special Submission Options Section

The special submission options allow you to set the cost analysis flag, set the query priority, rename a query, and set the result destination. Below are the options found in the special submission options section.

Cost Analyze Query

If the **Cost Analyze Query** checkbox is selected, a cost analysis will be performed on the query. If the query's estimated cost is greater than the user's cost threshold, as defined by the system administrator, the query is placed in the held queue.

Note: By default, the **Cost Analyze Query** checkbox is selected. This setting can only be changed if your system administrator assigns you the appropriate permissions. If you have not been given permission to change your cost analysis setting, this option is not active and the checkbox remains selected.

Results Destinations

The results destinations option provides choices if your system administrator has defined alternate result destinations in the DB2 Query Patroller system. Selecting Return Results Here creates a temporary result table in the database and allows the results to be returned to your query tool when they are available.

Priority

Selecting an item from the **Priority** drop-down list allows you to set the priority (low, normal, high) for your queries. The definition of these priorities must be established by the system administrator in the DB2 Query Patroller system.

Query Name

The query name section allows you to select and modify a query name. You can click the drop-down list to view existing query names. Clicking **Edit Names** opens the Edit the Name List window where you can add, edit, or delete a query name.

Chapter 2. Scheduling a Query

This chapter provides information and procedures for scheduling a query using the Schedule Query window.

To schedule a query using the Schedule Query window, perform the following steps:

1. Use your 32-bit ODBC query application to submit a query.

   If the same query already exists in the job table, the Result Set window opens. Otherwise, the Schedule Query window opens. If the Schedule Query window opens, go to step 3.
2. If the Result Set window opens, click **Submit Query**.

   The Schedule Query window opens.
3. Choose an execution mode: immediate execution, deferred execution, or recurring query.
4. Follow the instructions in the appropriate section below for the execution mode chosen.

Immediate Execution

To schedule a query for immediate execution, perform the following steps:

1. Complete the instructions in “Setting the Special Submission Options” on page 8.
2. Click **Submit and Wait**.

   Note: If you believe that the query is going to take a lot of time to complete or that the DB2 Query Patroller system is going to defer execution of the query based on its cost, click **Submit and Release**.
3. Go to “Chapter 3. Waiting for Query Results” on page 11.

Deferred Execution

To schedule a query for deferred execution, perform the following steps:

1. Set the execution date and execution time on the Schedule Query window. See “Setting Query Options” on page 8 for instructions on setting the execution date and time.
2. Set the special submission options on the Schedule Query window. See “Setting the Special Submission Options” on page 8 for instructions.

3. Click **Submit and Release**.
4. Go to "Chapter 4. Returning Query Results" on page 13.

Scheduling a Recurring Query

To schedule a recurring query:

1. Set the special submission options on the schedule Query window. See "Setting the Special Submission Options" for instructions.
2. Click **Schedule**.

   The Recurring Query Scheduler window opens.
3. Go to "Chapter 5. Scheduling a Recurring Query" on page 19.

Setting Query Options

Depending on the query execution mode, you may need to set the execution date, the execution time, and the special submission options.

Setting the Execution Date

In the calendar section of the Schedule Query window, perform the following steps to set the execution date.

1. Use the arrow push buttons above the calendar to select the month.
2. Select a day of the month for the query to begin executing.

   The selected day displays darker than the other days in the month.

Setting the Execution Time

In the time section of the Schedule Query window, perform the following steps to set the execution time:

1. Use the first set of up and down arrows to select the hour.

   Note: The a.m./p.m. designator cannot be set directly; it can only be set by setting the hour.
2. Use the second set of up and down arrows to select the minute.
3. Use the third set of up and down arrows to select the second.

Setting the Special Submission Options

In the special submission options section of the Schedule Query window, perform the following steps to set the special options.

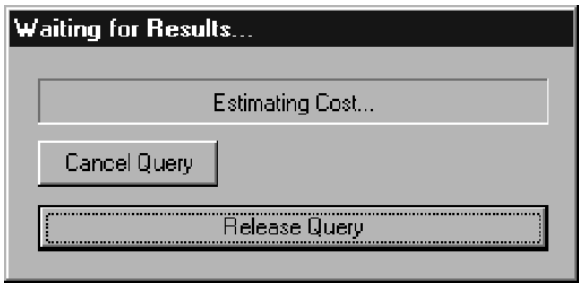
1. Select or deselect the **Cost Analyze Query** checkbox as needed.

2. In the **Priority** field, select a priority from the drop-down list.
3. In the **Results Destinations** field, select a result destination from the drop-down list.
4. In the **Query Name** field, select a query name from the drop-down list. If needed, click **Edit Names** to add, delete, or edit a query name.

Chapter 3. Waiting for Query Results

This chapter describes the Waiting for Results window and your options when waiting for query results.

If you clicked **Submit and Wait** on the Schedule Query window, the Waiting for Results window displays as illustrated below. The Waiting for Results window displays while the DB2 Query Patroller system processes the query. The status of the query displays in the upper portion of the ″Waiting for Results″ window. If the query completes successfully, the results are returned to your query application.



While the Waiting for Results window displays, you have three options:

- Wait for the query to complete, in which case, you take no specific action
- Release your query application but continue query execution
- Cancel the query

To release your query application but continue query execution, click **Release Query**. The Waiting for Results window closes, but the query continues to run and your query application is free to perform other tasks. This is equivalent to clicking **Submit and Release** on the Schedule Query window. Continue with “Chapter 4. Returning Query Results” on page 13 to determine how to return query results.

To cancel a query, click **Cancel Query**.

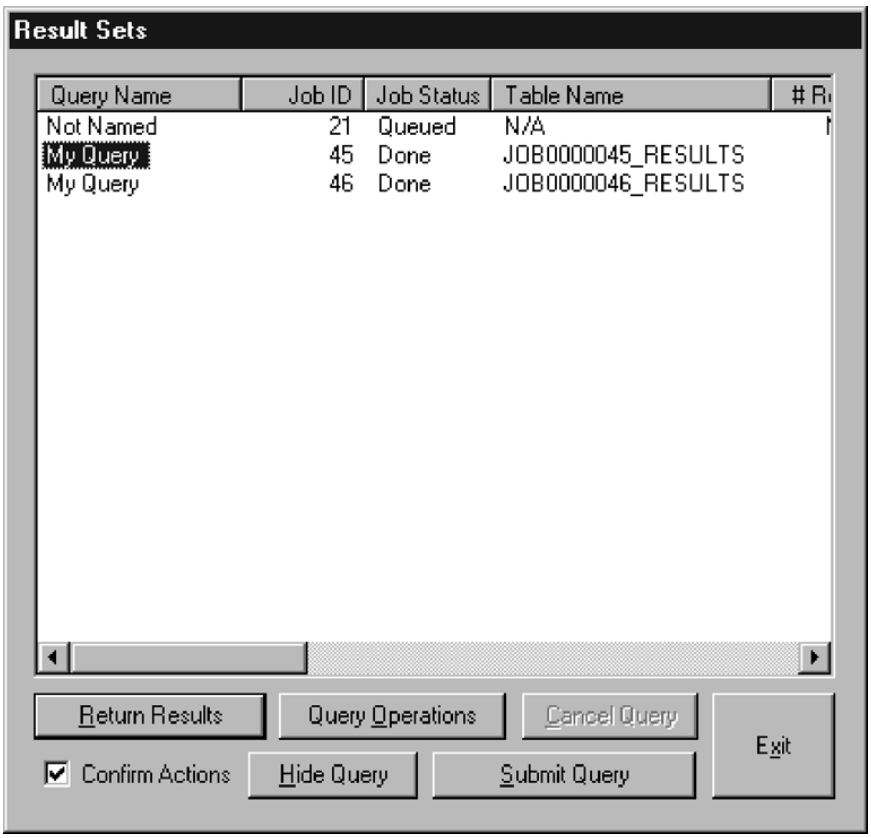
Chapter 4. Returning Query Results

This chapter provides information and procedures for using the Result Set window. The following topics are covered:

Using the Result Set Window

When you submit a query, the QueryEnabler component checks for matching queries in the job table. If matching queries exist, the Result Set window opens. Matching queries are displayed in tabular format along with information such as job status, scheduling time, and completion time. This window refreshes periodically based on database activity. The Result Set

window is illustrated below:



The table below contains a description of each column that displays in the Result Set window.

Table 2. Columns in the Select a Result Set Window

Column Name	**Description**
Query Name	The name of the query.
Job ID	The unique job ID assigned by the DB2 Query Patroller system.
Job Status	The status of the job, which can be: hold, done, queued, estimating, running, canceled, and aborted.
Table Name	The name of the result table. N/A indicates that the table name is not available.
# Rows	The number of result rows returned by the query.

Table 2. Columns in the Select a Result Set Window (continued)

Column Name	Description
Sched ID	The schedule ID, which is the same for a group of recurring queries submitted simultaneously.
Date/Time Submitted	The date and time the query was submitted.
Date/Time Scheduled	The date and time the query is scheduled to run.
Date/Time Completed	The date and time the query completed.
Results Destination	The alternate result destination.
Error Status	An error description, if the query was aborted.

Returning Query Results

To return the results of a previously submitted query, perform the following steps:

1. In the Result Set window, select a query name.
2. Click **Return Results**.

   The selected result set displays.

   Note: If a result set does not reside in DB2, the query name will appear in the list but the result set for that query name cannot be returned to the Result Set window.

Canceling an Individual Query

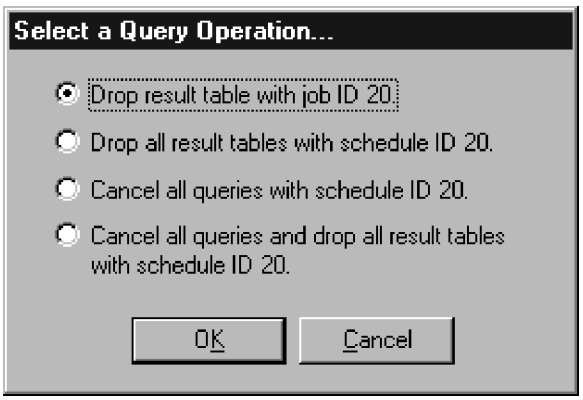
You can cancel an individual query that has not finished executing. To cancel an individual query, perform the following steps:

1. In the Result Set window, select the query name with a status of estimating, queued, hold, or running.
2. Click **Cancel Query**.

   Note: If the **Cancel Query** push button is not active, the selected query cannot be canceled.

Query Operations

The **Query Operations** push button on the Result Set window allows you to drop result tables and cancel individual queries and recurring queries. Clicking **Query Operations** displays the Query Operations window. The Query Operations window is illustrated below:



Dropping a Table

You can drop a result table for an individual query, or for all queries with the same schedule ID. To drop a result table for a specific job, click the radio button labeled **Drop result table with job ID** <*jobID*>, and click **OK**.

To drop the result tables for all jobs for a specific schedule, click the radio button labeled **Drop all result tables with schedule ID** <*scheduleID*>, and click **OK**.

Canceling All Recurring Queries

You can cancel all recurring queries that have the same schedule ID. Only queries that have not completed processing can be canceled.

To cancel all recurring queries for a specific schedule, click the radio push button labeled **Cancel all queries with schedule ID** <*scheduleID*>, and click **OK**.

Canceling All Queries and Dropping All Tables in a Schedule ID

To cancel all queries and drop all result tables for a Schedule ID, click the radio button labeled **Cancel all queries and drop all result tables with schedule ID** <*scheduleID*>, and click **OK**.

Resubmitting a Query

To resubmit a previously executed query, click **Submit Query** on the Result Set window. Clicking **Submit Query** automatically displays the Schedule Query window. For information about using the Schedule Query window, see “Chapter 2. Scheduling a Query” on page 7.

Exiting the Window

Use the **Exit** push button to exit the Result Set window.

Chapter 5. Scheduling a Recurring Query

This chapter provides information and procedures for using the DB2 Query Patroller Recurring Query Scheduler window. The following topics are covered:

The Recurring Query Scheduler Window

You can use the Recurring Query Scheduler window to schedule a recurring query for a specific date and time. The recurring query scheduler can also be used to schedule queries for a date range.

Accessing the Recurring Query Scheduler Window

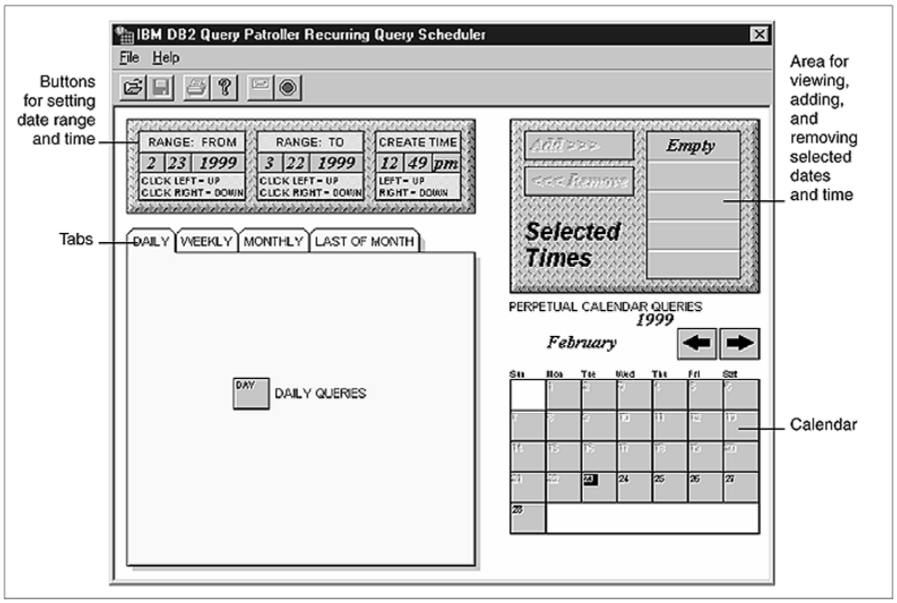
To access the DB2 Query Patroller Recurring Query Scheduler window, schedule a query as explained in the section "Scheduling a Recurring Query" on page 8.

The DB2 Query Patroller Recurring Query Scheduler window has four main sections:

- Push buttons for setting the date range and time

- Area for viewing, adding, and removing selected dates and times
- Perpetual calendar of months
- A tab section for setting daily, weekly, monthly, or last of month schedules

The Recurring Query Scheduler window is illustrated below:



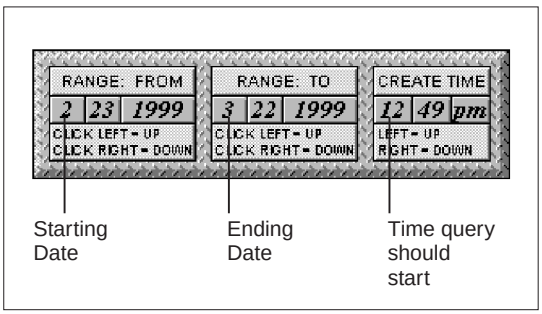
Opening an Existing Schedule for a Recurring Query

When you open the DB2 Query Patroller Recurring Query Scheduler window, a new, empty window displays. You can also open a previously saved schedule for a recurring query and perform the same functions as can be performed for a new query schedule. To open an existing schedule, select **Open** from the **File** drop-down list and select a path and file name.

Setting a Date Range and Time

The upper left portion of the DB2 Query Patroller Recurring Query Scheduler window contains a panel of push buttons for setting the date range and time. This panel contains three sets of push buttons: one for setting the first date the query should run, one for setting the last date the query should run, and one for setting the time of day the query should start. The date range is in the format of month, day, and year. The time push buttons are in the format of hour, minute, and an a.m. or p.m. designator. These push buttons are

illustrated below:



To set a date and time for a recurring query, perform the following steps:

1. In the Range: From section, click the left and right mouse push buttons to set the first month, day, and year on which the query should begin running. Clicking the left mouse push button increments the number displayed on a push button. Clicking past the last day in a month increments the month value to the next month. Clicking the right mouse push button decrements the number displayed on a push button. Clicking past the first day in a month decrements the month value to the previous month.

   Note: The default date is the current date. Queries scheduled before the current date are immediately submitted for processing.
2. In the Range: To section, click the left and right mouse push buttons to set the last month, day, and year on which the query should run.

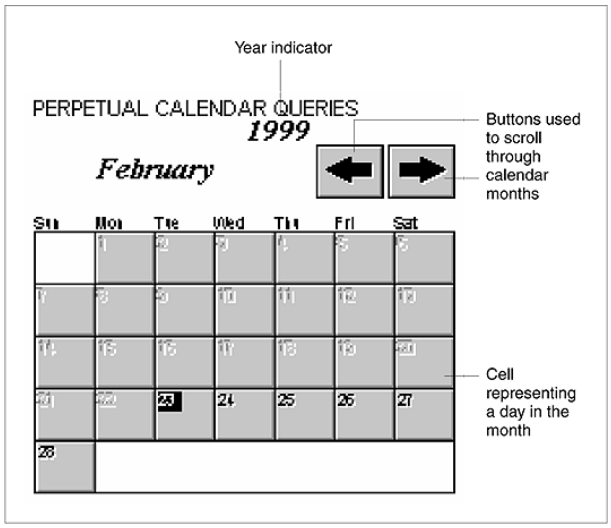
   Note: This date must be equal to or greater than the Range: From date. The default value is 12/31/2010.
3. From the Create Time section, click the left and right mouse push buttons to set the hours and minutes at which the query should start running. The a.m. or p.m. designator is set automatically.

Using the Perpetual Calendar

The perpetual calendar displays in the lower-right portion of the DB2 Query Patroller Recurring Query Scheduler window. The calendar contains the following features:

- push buttons for scrolling through calendar months
- Cells representing the days in the month
- Year indicator

An example of the calendar is illustrated below:



Scrolling through the Calendar Months

You can click the arrow push buttons above the calendar to scroll through the calendar months. You can only scroll through the calendar months which fall between the selected Range: From and Range: To date values.

Understanding the Symbols for a Calendar Cell

Calendar cells represent the days in the month. The table below describes the various ways these cells can appear.

Table 3. Calendar Cell Icons

Icon	Description
	Normal. Day falls within date range and is not the current day.
	Grayed. Day does not fall within date range and is not current day.
	Current day.

Table 3. Calendar Cell Icons (continued)

Icon	Description
	Selected day. Cell is depressed and is darker than other cells.
	Schedule gauge bar. A schedule guage bar indicates a scheduled query for this day.

Scheduling a Query for a Specific Day in the Perpetual Calendar

To schedule a query to run on a specific day in the perpetual calendar, perform the following steps:

1. Access the Recurring Query Scheduler window as explained in “Accessing the Recurring Query Scheduler Window” on page 19.
2. Set the date range push buttons to display the month you want to schedule a query for. See “Setting a Date Range and Time” on page 20.
3. Click the day of the month you want the query to run.
4. Click **Add>>>**.

The specified time displays in the field next to the **Add>>>** push button and the selected calendar day displays a schedule gauge similar to the one shown in the calendar cell icons table above.

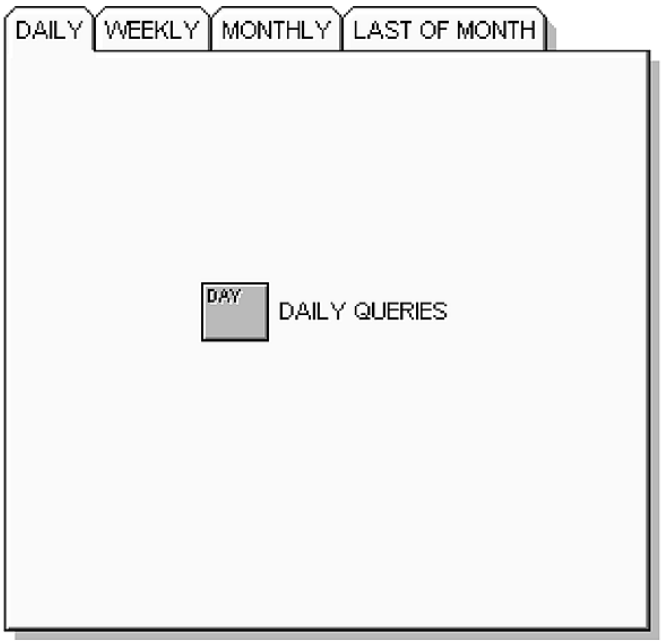
Scheduling a Query to Recur Every Day in a Given Date Range

To schedule a query to run for all days in a given date range, perform the following steps:

1. Access the Recurring Query Scheduler window as explained in “Accessing the Recurring Query Scheduler Window” on page 19.
2. Set the date range for the recurring query. See “Setting a Date Range and Time” on page 20 for instructions on setting a date range.

   Note: You can only schedule a query to recur for a maximum of 31 days.
3. Click the **Daily** tab.

The Daily page displays as illustrated below:



4. On the Daily page, click **Day**.
5. Click **Add>>**.

   All calendar days within the specified date range are displayed with schedule gauges and the time of query execution is displayed in the field next to the **Add>>** push button.

Scheduling a Query to Recur Weekly

Use the Weekly page to schedule a query to run on a specific day and week in a month.

The Weekly page contains a weekly queries section that represents each day in the week. This page also contains radio buttons for selecting the time of month the query should be scheduled.

The weekly queries section and radio buttons work together to define when a recurring query will run. For example, if you clicked **Mon** in the weekly queries section and selected the **First in Month** radio button, the query is scheduled to run on the first Monday of each month in the date range you have specified. Selecting the **Third in Month** radio button schedules the query to run on the third Monday of each month in the date range you have

specified. You can select any combination of radio buttons. Selecting the **All in Month** radio button causes all of the other radio buttons to be selected.

To schedule a query to recur weekly, perform the following steps:

1. Access the Recurring Query Scheduler window as explained in "Accessing the Recurring Query Scheduler Window" on page 19.
2. Set the date range for the recurring query. See "Setting a Date Range and Time" on page 20 for instructions on setting a date range.
3. Click the **Weekly** tab.
4. On the Weekly page, select the day of the week you want the query to run.
5. Select the appropriate radio buttons to set the time of month the query will run.
6. Click **Add>>>**.

   The days that the query is scheduled to run are indicated in the perpetual calendar section by schedule gauges.

Scheduling a Query to Recur Monthly

Use the Monthly page to schedule a query for a specific day for all months in a given date range. To schedule a query to recur monthly, perform the following steps:

1. Access the Recurring Query Scheduler window as explained in "Accessing the Recurring Query Scheduler Window" on page 19.
2. Set the date range for the recurring query. See "Setting a Date Range and Time" on page 20 for instructions on setting a date range.
3. Click the **Monthly** tab.
4. On the **Monthly** page, select a day for the query to execute.
5. Click **Add>>**.

   The perpetual calendar displays a schedule gauge on the scheduled day for each month in the specified date range.

Scheduling a Query to Recur on the Last Day of the Month

To schedule a query on the last day of the month, perform the following steps:

1. Access the Recurring Query Scheduler window as explained in "Accessing the Recurring Query Scheduler Window" on page 19.

2. Set the date range for the recurring query. See “Setting a Date Range and Time” on page 20 for instructions on setting a date range.
3. Click the **Last of Month** tab.
4. On the Last of Month page, click **Last**.

   The last day of the month displays a schedule gauge and the scheduled query time displays to the right of the **Add>>** push button.

Saving a Recurring Query Schedule

After scheduling a recurring query in the DB2 Query Patroller Recurring Query Scheduler window, you can save the schedule. You can use the same schedule for different queries. To save a query schedule, select **Save** from the **File** drop-down list.

Note: Performing the **Save** function saves the schedule of dates; it does not schedule the queries in the DB2 Query Patroller system.

Sending a Recurring Schedule

After setting a recurring query schedule, you can send the schedule to the DB2 Query Patroller system for processing. To send a query schedule to the DB2 Query Patroller system, perform the following steps:

1. Access the Recurring Query Scheduler window as explained in “Accessing the Recurring Query Scheduler Window” on page 19.
2. If necessary, open the calendar schedule as explained in “Opening an Existing Schedule for a Recurring Query” on page 20.
3. Click **Send**. The **Send** push button is illustrated below:

Removing a Recurring Scheduled Query

In addition to scheduling a new query, the Query Scheduler allows you to remove an existing recurring query.

Removing a Query for a Specific Day in the Perpetual Calendar

To remove a scheduled query for a specific day in the calendar, perform the following steps:

1. Access the Recurring Query Scheduler window as explained in “Accessing the Recurring Query Scheduler Window” on page 19.
2. If necessary, open the saved query schedule as explained in “Opening an Existing Schedule for a Recurring Query” on page 20.
3. Click the day of the month for which you want to delete a query. The day must display a schedule gauge in order for you to remove a scheduled query.
4. If more than one query is scheduled to run, click the scheduled time that you want to remove in the Selected Times panel.
5. Click **<<Remove.**

   The recurring query is removed from the selected day. The scheduled time for the query is no longer displayed in the Selected Times panel.

Removing a Recurring Query Scheduled to Run for All Days in a Date Range

To remove a query scheduled to run at a specific time for all days in a given date range, perform the following steps:

1. Access the Recurring Query Scheduler window as explained in “Accessing the Recurring Query Scheduler Window” on page 19.
2. Click the **Daily** tab.

   On the Daily page, a schedule gauge displays on the **Day** push button. On the calendar, all days in the scheduled date range display schedule gauges.
3. Click **Day**.
4. If more than one query is scheduled to run on this day, select the scheduled time that you want to remove in the Selected Times panel.
5. Click **<<Remove**.

   The recurring query is removed from the schedule and the schedule gauges no longer appear.

Removing a Weekly Recurring Query

To remove a recurring weekly query, perform the following steps:

1. Access the Recurring Query Scheduler window as explained in “Accessing the Recurring Query Scheduler Window” on page 19.
2. Click the **Weekly** tab.

   On the Weekly page, a schedule gauge displays on the **Weekly Queries** push button and on the corresponding day in the perpetual calendar.

3. Click the **Weekly Queries** push button containing the schedule gauge.
4. If more than one query is scheduled to run on that day, click the scheduled time that you want to remove in the Selected Times panel.
5. Click **<<Remove**.

   The scheduled weekly query is removed from the calendar and the schedule gauges no longer appear.

Removing a Recurring Monthly Query

To remove a monthly recurring query, perform the following steps:

1. Access the Recurring Query Scheduler window as explained in "Accessing the Recurring Query Scheduler Window" on page 19.
2. Click the **Monthly** tab.

   On the Monthly page, a schedule gauge displays on day of the recurring query. A schedule gauge appears on the corresponding day in the perpetual calendar.
3. On the Monthly page, click the day containing the schedule gauge.
4. If more than one query is scheduled to run on that day, click the scheduled time that you want to remove in the Selected Times panel.
5. Click **<<Remove**.

   The scheduled monthly query is removed from the calendar and the schedule gauge no longer appears.

Removing a Recurring Query Scheduled to Run on the Last Day of the Month

To remove a scheduled query from the last day of the month, perform the following steps:

1. Access the Recurring Query Scheduler window as explained in "Accessing the Recurring Query Scheduler Window" on page 19.
2. Click the **Last of Month** tab.

   On the Last of Month page, a schedule gauge displays on the **Last** push button and on the last day of the month in the perpetual calendar.
3. On the Last of Month page, click the **Last** push button.
4. If more than one query is scheduled to run on this day, click the scheduled time that you want to remove in the Selected Times panel.
5. Click **<<Remove**.

   The scheduled query is removed from the calendar and the schedule gauges no longer appear.

Viewing a Report of Scheduled Queries

To view a report of all scheduled queries in a date range, select **Print Preview** from the **File** drop-down list.

While viewing the report, click one of the following push buttons:

- **Print** to print the report contents
- **Next Page** to view the next page in the report (if applicable)
- **Prev Page** to view the previous page in the report (if applicable)
- **Two Page** to view the report in two page format
- **Zoom In** to enlarge the report view
- **Zoom Out** to minimize the report view
- **Close** to return to the DB2 Query Patroller Recurring Query Scheduler window

Part 2. QueryMonitor

Chapter 6. Introduction to QueryMonitor

About QueryMonitor

This section of the User's Guide provides the procedures for using QueryMonitor, a component of the DB2 Query Patroller system. QueryMonitor provides you with the ability to monitor queries that you have submitted through the DB2 Query Patroller system.

Before You Get Started

The procedures in this manual assume that you have already installed QueryMonitor according to the instructions in the DB2 Query Patroller Installation Guide.

Starting QueryMonitor

Use the following procedure to start QueryMonitor:

1. Select **Start** > **Programs** > **DB2** > **DB2 Query Patroller** > **QueryMonitor**. The QueryMonitor Login window displays.
2. Enter the user name and password.
3. Enter the database alias.
4. Click **OK**. The QueryMonitor main window opens.

Stopping QueryMonitor

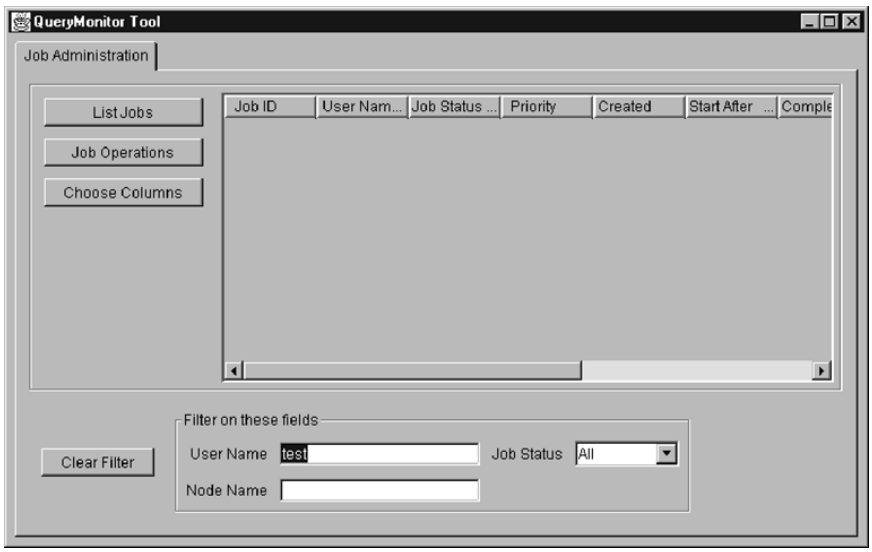
To stop QueryMonitor, close the window.

Chapter 7. Using QueryMonitor

This chapter provides information and procedures for using the QueryMonitor utility. The following topics are covered:

The DB2 Query Patroller system is used to prioritize and schedule queries so that query completion is more predictable and computer resources are efficiently utilized. DB2 Query Patroller provides many components to use in the query process. Using these components, jobs can be submitted for execution, resubmitted, scheduled, and canceled. Results tables can be viewed and dropped. The QueryMonitor utility enables you to monitor and manage your individual queries.

The QueryMonitor main window is illustrated below:



Default Columns in the QueryMonitor Main Window

The table below contains a description of each column that displays by default in the QueryMonitor main window. See “Choosing Columns” on page 38 for information on how to add columns to or delete columns from the window.

Table 4. Default Columns in the QueryMonitor Main Window

Column	Description
Job ID	Displays the job ID.
User Name	Displays the user name.
Job Status	Contains the job status. Valid values are: • aborted • cancelled • done • estimating • hold • queued • running • scheduled
Priority	Indicates the priority assigned to the job.
Created	Displays the date and time the job was created.
Start After	Displays the date and time after which the job can be scheduled for execution.
Completed	Displays the date and time the job was completed, aborted, or canceled.
Result Rows	Indicates the number of rows returned in the result set.
Result Destination	If results were saved to an alternate destination, this field contains the name of that destination.
Result Table Name	If results were saved to the default location, this field contains the result table name.
Estimated Cost	Displays the estimated database cost for the job.

Push Buttons on the QueryMonitor Main Window

The table below contains descriptions of each push button on the QueryMonitor main window.

Table 5. push buttons on the QueryMonitor Main Window

Push Button	Description
List Jobs	Used to display the job list. Also used to refresh the contents of the job list.
Job Operations	Displays a list of other functions that can be performed in QueryMonitor. You can use this push button to view a job detail, cancel a job, drop a result set, and submit a new job.
Choose Columns	Used to select which columns display in the job list.
Clear Filter	Used to clear the filtering criteria for the job list.

Displaying a Job List

To display a job list, complete the following steps:

1. Start QueryMonitor.
2. Click **List Jobs**.

   DB2 Query Patroller searches for all jobs that match your user ID and QueryMonitor displays the job list on the screen in tabular format. If you are an administrative user or operator, all jobs will display.

   Note: If you click **List Jobs** after resizing the column widths, the default column widths redisplay.

Specifying Which Jobs to Display

You can use the filter criteria at the bottom of the QueryMonitor screen to choose which jobs to display. For example, you can display jobs with a done status, jobs residing on a particular node, or a combination of the two. However, you cannot obtain a job listing for user IDs other than your own.

Note: If you are an administrative user or operator, you can view jobs for all users. You can also specify the user ID as an additional filter criterion.

To specify which jobs to display, complete the following steps:

1. Start QueryMonitor.
2. Select the filter criteria as follows:
   a. Type the name of the node in the **Node Name** field to search for all jobs on a specific node.

b. If you are the administrative user or operator, type the user name in the **User Name** field and press the **Enter** key to list all jobs for a specific user.

c. Select a status in the **Job Status** field to list all jobs with a specific status.

Note: Whenever you change the **Job Status** field, the job list automatically redisplays.

3. If you did not change the **Job Status** field, click **List Jobs** to refresh the job list. The job list summary displays all jobs that match the specified criteria.

To clear the filtering criteria, complete the following steps:

1. Click **Clear Filter**.

Note: If you specified a job status other than All, the job status reverts to All and the job list automatically redisplays.

2. If you did not change the job status field initially, click **List Jobs** to refresh the job list.

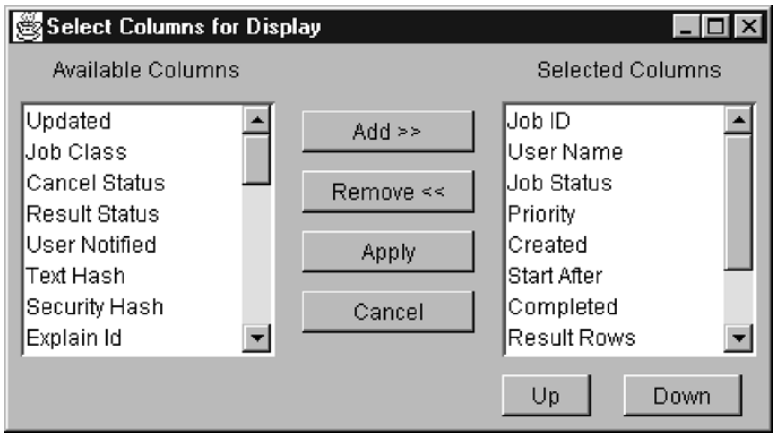
Choosing Columns

Whenever you are displaying the job list, you can choose which columns you want to display.

To choose the columns, complete the following steps:

1. Click **Choose Columns**.

   The Select Columns for Display window displays as shown below:



2. To add a column to the display, do the following:

   a. Select the column to be added from the **Available Columns** list.

b. Click **Add>>** to add the column to the **Selected Columns** list.
c. Select the newly added column in the **Selected Columns** list.
d. Click **Up** or **Down** to move the newly added column to the position where you want it to be displayed.

3. To remove a column from the display, do the following:
   a. Select the column to be removed from the **Selected Columns** list.
   b. Click **<<Remove**.
4. Click **Apply** when you have finished adding and removing columns.

Note: Any changes you make to the columns displayed are retained for the current session only.

Reordering the Job List by Column

You can reorder the job list in ascending or descending order by any displayed column.

To reorder the job list by a particular column, click the column heading. The job list will be displayed in ascending or descending order.

Note: The first time you click a column heading, the job list is reordered in descending order. Clicking the same column again reorders the job list in ascending order.

Resizing Columns

You can resize any column in the job list.

To resize a column, complete the following steps:

1. Move the mouse pointer to the vertical line forming the right edge of the column heading.

   The mouse pointer changes to a double arrow.
2. Left-click and hold the mouse push button on the vertical line. Move the line to resize the column.
3. Release the mouse push button.

Note: Any changes you make to the columns displayed are retained for the current session only. If you click List Jobs after resizing the column widths, the default column widths redisplay.

Refreshing the Job List

You must refresh the job list to retrieve the most current information from the DB2 Query Patroller system. Some operations such as changing the job status filter criteria, or submitting a new job, automatically refresh the job list for you.

To manually refresh the job list, click **List Jobs**.

Note: If you click **List Jobs** after resizing the column widths, the default column widths redisplay.

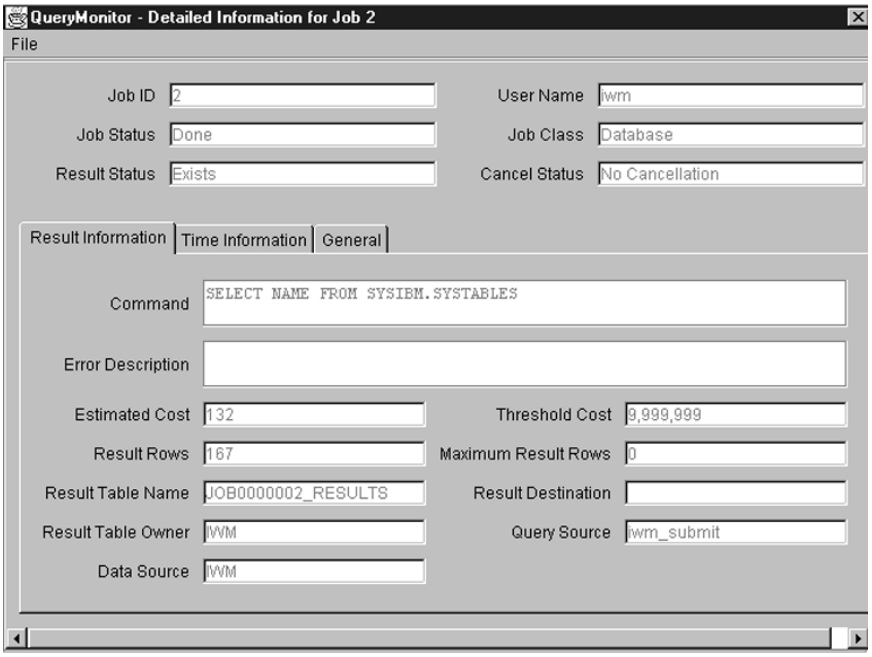
Displaying Detailed Job Information

From the QueryMonitor main window, you can select a specific job and drill down to view detailed information about that job.

1. Select the job that you want to display detailed information for.

   Note: To select more than one job, press and hold the **Shift** key while selecting the jobs.
2. Right-click on **Job Operations**. A pop-up menu opens.
3. Select **Job Detail**.

Detailed job information displays for each selected job in a separate Detailed Information for Job window similar to the one shown below:



Note: You can also double-click a job to display detailed job information for that job.

4. Select one of the following tabs to view specific job detail information:
   - **Result Information**

     The Result Information page displays the SQL statement, error descriptions, estimated and threshold costs, and additional result information.
   - **Time Information**

     The Time Information page displays the time the job was created, scheduled, started, updated, and completed. This page also indicates if and when the user notification was sent.
   - **General**

     The General page displays the submitting node and ID; job priority and predecessor, explain ID, queue ID, process ID, node ID, source ID; and security and text hash values.

Fields Above the Tab Section in the Detailed Information for Job Window

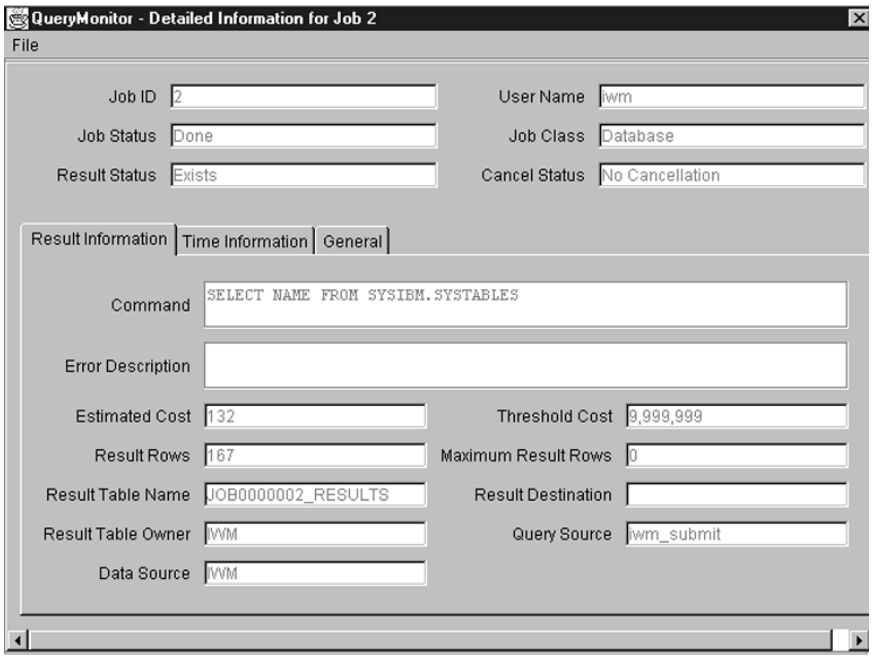
The table below contains a description for each field at the top of the Detailed Information for Job window.

Table 6. Fields Above the Tabs in the Detailed Information for Job Window

Field	Description
Job ID	Contains the user ID.
User Name	Contains the user name.
Status	Indicates the query status. Valid values are: • estimating • queued • held • scheduled • running • done (completed successfully) • aborted (completed unsuccessfully) • cancelled
Job	Indicates the job type. Valid values are: • database. Indicates database command • OS. Indicates operating system command
Result Status	Indicates the result status. Valid values are: • purged due to abort • truncated • not existing • exists • dropped
Cancellation Status	Indicates the status of any cancellation requested for this job. Valid values are: • no cancellation - no cancellation has been requested • cancellation requested - cancellation was requested but not yet accepted • cancellation accepted - cancellation accepted by DB2 Query Patroller

Displaying Result Information

To view result information, click the **Result Information** tab on the Detailed Information for Job window. The Result Information page is illustrated below:



The table below contains a description of each field on the Result Information page.

Table 7. Fields on the Result Information Tab

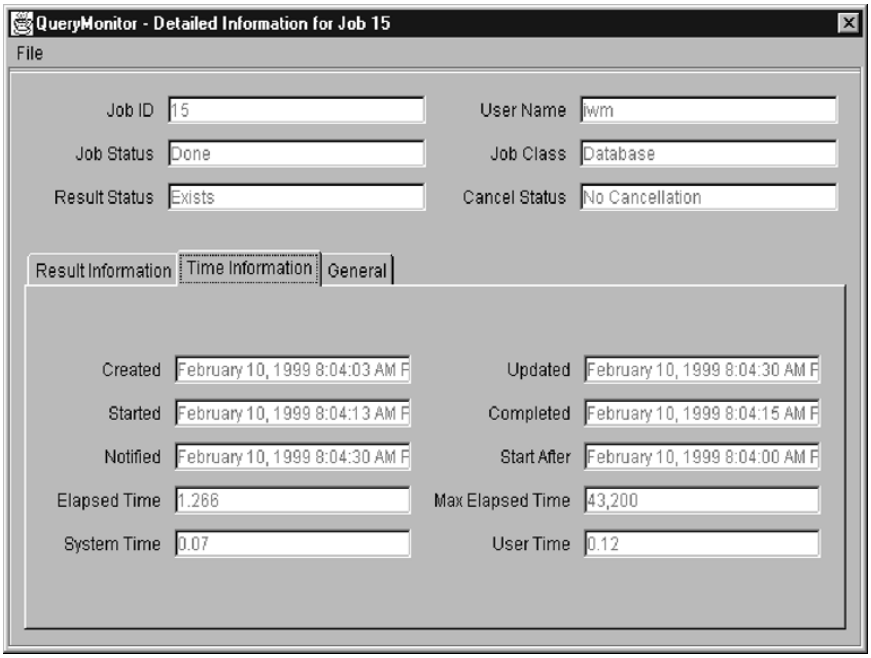
Field	Description
Command	Contains the SQL command.
Error Description	Indicates the reason the job was put on hold or aborted.
Estimated Cost	Indicates the estimated database cost.
Threshold Cost	Indicates the user's threshold cost.
Result Rows	Indicates the number of rows returned in the result set.
Max Result Rows	Indicates the user's threshold for the maximum number of rows in a result set.
Result Table Name	Contains the name of the result table.
Result Destination	Contains the name of the alternate result destination.

Table 7. Fields on the Result Information Tab (continued)

Field	Description
Result Table Owner	Contains the name of the result table owner.
Query Source	Indicates the application that created the job.
Data Source	Indicates the data source against which the query was run.

Displaying Time Information

To view time information, click the **Time Information** tab on the Detailed Job Information window. The Time Information page is illustrated below:



The table below contains a description of each field on the Time Information page.

Table 8. Fields on the Time Information Page

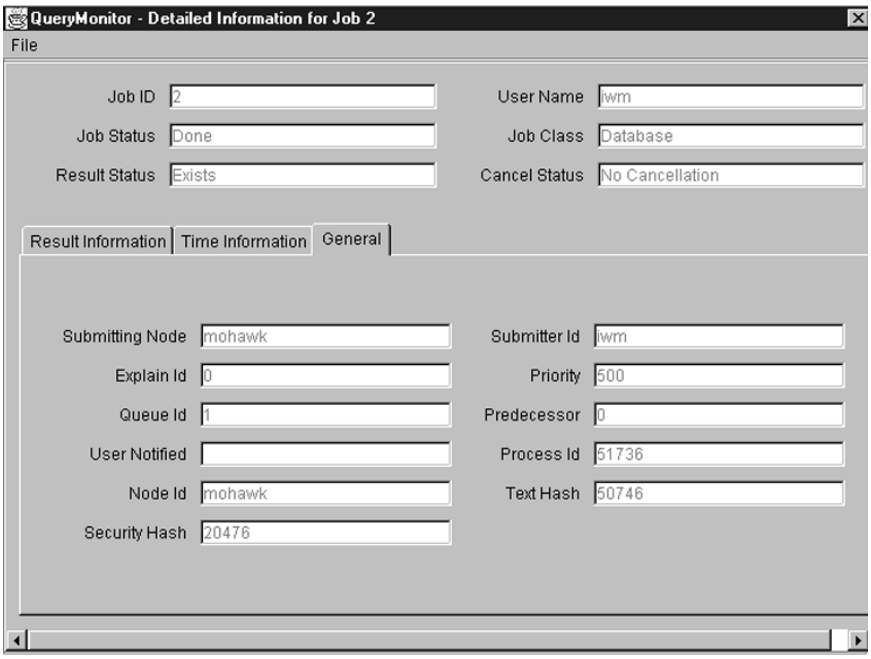
Field	Description
Created	Indicates the date and time the query was created.
Updated	Indicates the date and time the query was updated, if applicable.

Table 8. Fields on the Time Information Page (continued)

Field	Description
Started	Indicates the date and time the query began execution, when applicable.
Completed	Indicates the date and time the query completed, if applicable.
Notified	Indicates the date and time the user notification of query completion was sent, if applicable.
Start After	Indicates the date and time after which the job can be scheduled for execution.
Elapsed Time	Displays the number of seconds it took the job to run.
Max Elapsed Time	Indicates the maximum number of seconds allowed for the job run time.
System Time	Indicates the system CPU time in seconds that were used to run this job.
User Time	Indicates the user CPU time in seconds that were used to run this job.

Displaying General Information

To view general information, click the **General** tab on the Detailed Information for Job window. The General page is illustrated below:



The table below contains a description of each field on the General page.

Table 9. Fields on the General Page

Field	Description
Submitting Node	Contains the name of the node from which the query was submitted.
Submitter ID	Contains the ID of the user who submitted the job.
Explain ID	Contains the ID of the SQL statement in the explain cache.
Priority	Displays the priority level for the query.
Queue ID	Indicates the job queue ID.
Predecessor	Identifies which job must complete successfully before this job can be scheduled for execution.
User Notified	Indicates whether or not the user was notified of query completion. Valid values are Yes or No.
Process ID	Contains the process ID of the executor component.

Table 9. Fields on the General Page (continued)

Field	Description
Node ID	Contains the node ID on which the job was executed.
Text Hash	Contains a hash value used to limit the number of rows scanned to find a specific SQL statement.
Security Hash	Contains the hash value used to ensure that job data is not modified.

Refreshing the Detailed Information for Job Window

To refresh the Detailed Job Information window with the most current information, select **Refresh** from the **File** menu.

Closing the Detailed Information for Job Window

To close the Detailed Information for Job window, select **Close** from the **File** menu, or close the window.

Submitting a New Job

Typically, you will use a 32-bit query application to submit queries. However, you can use QueryMonitor to submit simple SQL statements to the DB2 Query Patroller system.

To submit a new job, complete the following steps:

1. Right-click on **Job Operations**.
   A pop-up menu displays.
2. Select **New Job**.
   The Job Operations window displays.
3. Enter the complete SQL statement in the text box.
4. Click **OK**.
   The job list is refreshed and displays the new job.

Dropping a Result Set

If you are finished viewing a result set, you can drop the result set to free up space in the database.

To drop a result set, complete the following steps:

1. Select the job for which you want to drop results. The selected job must have a status of done.

Note: To select more than one job, press and hold the **Shift** key while selecting jobs.

2. Right-click **Job Operations**.

   A pop-up menu displays.
3. Select **Drop Result Set**.
4. Click one of the following push buttons:
   - **Yes**, to drop the result set for the current job number.
   - **No**, if you do not want to drop the result set for the current job number.

Modifying Job Status

You can use QueryMonitor to modify job status.

To cancel or queue a job, complete the following steps:

1. Select the job you want to cancel or queue. The selected job must have a status of estimating, hold, queued, or scheduled.

   Note: To select more than one job, press and hold the **Shift** key while selecting jobs.
2. Right-click on **Job Operations**.

   A pop-up menu displays.
3. Select **Modify Status**.

   The Job Operation window displays.
4. From the drop down list select either **Cancel** or **Queue**. The **Queue** option is only available to operators and administrative users.
5. Click **Yes** to change the job status, or click **No** to cancel.

   Note: It may take a few moments for the job list to refresh.

Resubmitting a Job

You can use the QueryMonitor to resubmit a job that has already completed.

To resubmit a job, complete the following steps:

1. Select the job you want to resubmit. The selected job must have a status of done.
2. Right-click **Job Operations**. A pop-up menu displays.
3. Select **Resubmit Job**.
4. Click **Yes** to resubmit the job, or click **No** to Cancel.

Part 3. Appendixes

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- 1-800-IBM-CALL (1-800-426-2255) or 1-800-3IBM-OS2 (1-800-342-6672) to order products or get general information.
- 1-800-879-2755 to order publications.

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`http://www.ibm.com/support/`

then performing a search using the keyword “handbook”.

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http://www.software.ibm.com/data/db2/library/

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Anonymous FTP Sites

ftp.software.ibm.com

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Internet Newsgroups

comp.databases.ibm-db2, bit.listserv.db2-l

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CompuServe

GO IBMDB2 to access the IBM DB2 Family forums

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