

**Oracle® Retail XBR Loss Prevention and Store
Analytics**
Fundamental Training Guide
Release 7.0

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CHAPTER

1

Introduction

OVERVIEW

Note: The rebranding for the latest version of this documentation set is in development as part of post MICROS acquisition activities. References to former MICROS product names may exist throughout this existing documentation set.

Analytics is a reporting tool that allows users to run XBR (Exception Based Reports). XBR can help you dramatically reduce shrink resulting in immediate savings, greater productivity, and ROI. XBR uses exception-based reporting methods to easily identify, track and manage potentially fraudulent transactions. XBR can flag incidents almost as they happen, which allows for quicker investigation and ultimate resolution. With Analytics you can:

- Ensure Account numbers are secure and are encrypted.
- Focus on in-store theft, fraudulent transactions, compliance, and training issues.
- Find problematic trends in store and cashier activity.
- Track exceptions and manage each case to conclusion.
- Monitor historically troublesome transactions such as voids, no sales, refunds/exchanges, employee discounts, low dollar transactions and dropped sales.

LEARNING OBJECTIVES

Upon completion of this section, participants will know:

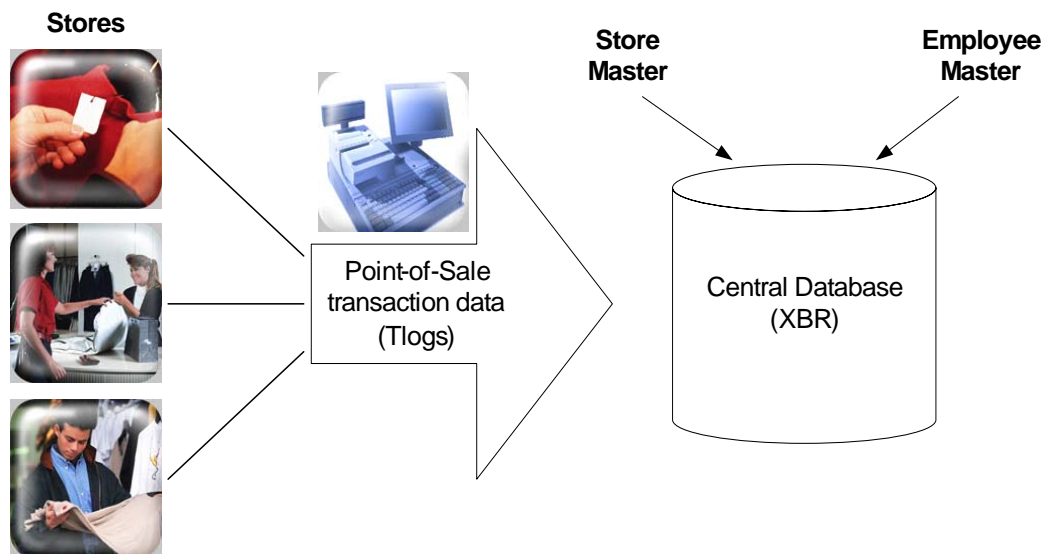
- Where data originates.
- How data is organized.
- The different query types.
- How to login.
- The anatomy of the main screen.
- Where to get help.

WHERE DOES XBR DATA ORIGINATE?

XBR Store Analytics is a window to the Point-Of-Sale (POS) activity in your stores that allows you to look for trends and exceptions in the data. Your home office collects the Transaction data from the registers at each store. Your POS system polls each store's transactions and transfers them to your home office in the format of a Transaction log (Tlog) file. A Loader program then processes and formats the data and saves it to the XBR database.

A Project Consultant works with a representative from your company to determine the risk areas and specific information that should be captured from the t-log for reporting purposes in XBR. The more information your Tlog contains, the more robust your Loss Prevention reporting can be.

Register systems are polled daily at each of the stores within your organization.



Analytics' Loader program processes POS data from the Tlogs (or reporting views are set up within a data warehouse) and organizes the data into three accessible levels (Summary, Header and Detail) for reporting purposes.

Figure 1-1: Origin of XBR Data

HOW IS DATA ORGANIZED?

The POS data that is stored in the XBR database is accessible at **THREE** different levels for reporting purposes: Summary, Header, and Detail. The Queries you will use later in this course are built using the data from one of these three levels. The following table describes these three levels and provides an example of each:

Level	Description
Summary	<p>Provides Summary level statistics by store, cashier or register. There is only one line for each store (or cashier or register). This level does not provide transaction specific information.</p> <p>Example: Example: At store 220, there were 10 manually keyed credit card transactions totaling \$500 yesterday.</p>
Header	<p>The Header level contains one summary line for each transaction. This can include: Cashier ID and Name, Transaction Date, Time and Number, Total Transaction Amount, and Tender Type</p> <p>There are additional indicators at this level, called flags, identifying various types of special activity associated with a transaction like employee sale.</p> <p>Example: On February 28, 2005, Cashier #91375 rang a merchandise purchase on transaction #548. This transaction that tendered for \$100.00 at Register #3 at 11:30 am.</p>
Detail	<p>The Detail level contains multiple rows of detailed data per transaction in addition to the data available at the Header level. This data includes Account numbers, SKU, tax and tender, and can include SKU level details such as, SKU ID, SKU description, SKU quantity, line discounts for a specific SKU, and extended amounts per specific SKUs.</p> <p>Example: On the above Header level example, the first SKU on this transaction was SKU #46802, a white t-shirt, originally priced for \$30.00 but with a line discount, was priced at \$25.00. The second SKU on this transaction was SKU #67329, a pair of jeans, priced at \$55.00. The third SKU on this transaction was a leather belt priced at \$20.00. This was a Credit Card transaction on a Discover Account "6011 XXX XXX 5555".</p> <p>This level would specify not only the amount tendered, but also would display split payments and cash back, if applicable.</p>

SUPPLEMENTAL FILES

Supplemental files supply supportive data to the database that can also be used in XBR reports. This data is in addition to the POS data downloading from the stores daily. This information is an important component of data organization because it helps identify trends more readily by providing extra data not typical of the POS system, such as Employee Name, Store Manager Name, etc. For example: *an XBR user may not notice employee # 93687 is an issue until the name "Jane Smith" is visible in the query results numerous times.*

The common master files include the Store Master, Employee Master and Register Master. However, modifications exist to enable other master files to be added to the database as well, such as Region Master and District Master.

Supplemental File	Description
Store Master	Provides store name, city, state, store manager name, and store phone number.
Employee Master	Provides employee name, employee number, social security number, and job code.
Register Master	Provides register number, type, location and group, and store number, etc.
SKU Master	Provides information about each SKU, i.e. SKU number, Description, UPC and size.

LOGGING INTO ANALYTICS

For security, all Analytics users have a unique ID and password which allows them to access the modules and queries that are appropriate for their job. For instance, an Analytics customer who has both XBR Store Analytics and Balance may have some users who require access to both modules and other users who only need access to one. This type of security is administered through the User ID and Password. If you are using LDAP you will not be asked for your user ID and password for Analytics since LDAP uses your Windows ID and password.

How to Log into Analytics

1. Double-click the **Analytics** icon located on your desktop. The Analytics Log On screen is displayed.



Figure 1-2: Analytics Log On Screen

2. Type your **User ID**.
3. Click in the **Password** text box and type your password. As you type in the Password box, each character appears as a small rectangle for security.



If your database is SQL 2005 the password is case sensitive and needs to be in capital letters.

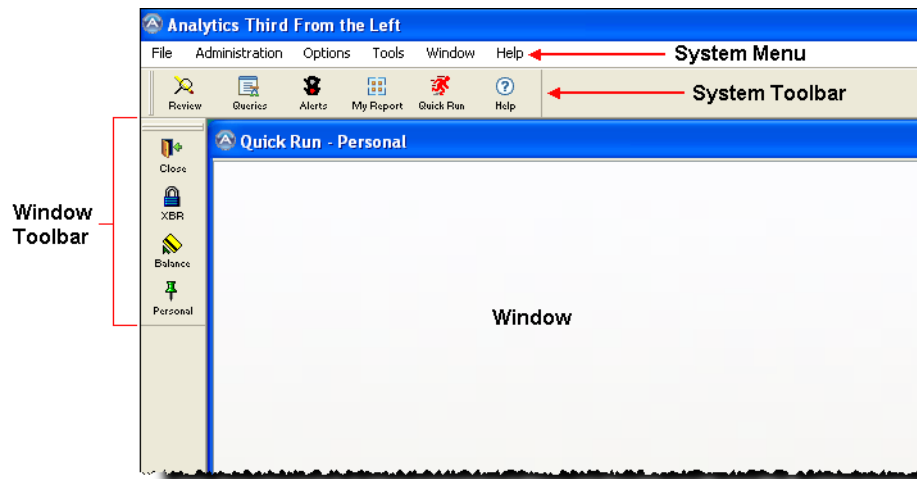
4. Click the **Start** button or press **[ENTER]**.

Once you have logged in successfully, the dialog box remembers your User ID and automatically places the cursor in the **Password** box.

ANATOMY OF XBR'S MAIN SCREEN

The XBR Main Screen consists of the:

- System Menu
- System Toolbar
- Window Toolbar
- Window



The System Menu provides various options that affect the system.

The System Toolbar provides access to the various types of XBR windows: Review, Queries, Alerts, My Report, Quick Run, and Help.

The Window Toolbar presents different options depending on which window is open. This allows you to know what functionality is available to you within the different windows (i.e. Quick Run or Queries).

How Do I MOVE/RECOVER MY TOOLBARS

If you inadvertently hide a toolbar, you can easily recover it again. You can also determine the location of the toolbar.

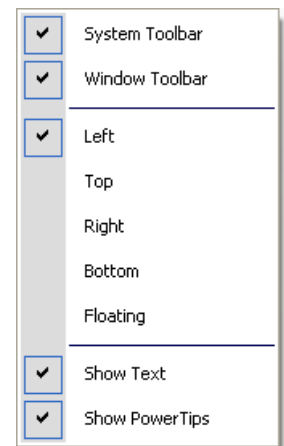
The names of the two Analytics toolbars - System Toolbar and Window Toolbar - display at the top of the short-cut menu when you right click in the toolbar area. When a toolbar name is checked, it displays on your screen and when it is unchecked, it is hidden.

How to Move/Recover the Toolbars



If neither toolbar is displayed, use the alternate procedure shown below.

1. Right-click on the toolbar that remains on your screen. A shortcut menu displays (see right).
2. Click the name of the toolbar you would like to recover (System or Window) and a check mark is displayed to the left of the name.
You can hide a toolbar by clicking the name of the toolbar so that the check mark disappears.
3. Change the location of the toolbar by selecting the desired position: **Left**, **Top**, **Right**, **Bottom**, or **Floating**.
If you select **Floating**, the toolbar has no set position; you can move it anywhere you like on the screen.
4. You can toggle the text under each icon in the toolbar on or off by selecting **Show Text** in the shortcut menu.
5. If you hover the mouse over an icon in a toolbar, the name of the toolbar is displayed. This is called a ToolTip or PowerTip. You can toggle this display on or off by selecting **PowerTip** in the shortcut menu.



Alternate Procedure

1. Select **Window -> Toolbars** from the System Menu (or press **[Ctrl] + [t]**).

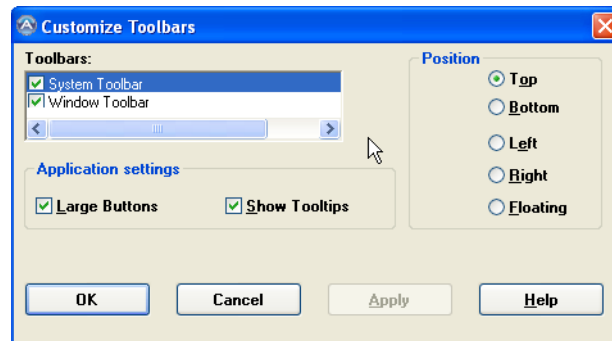


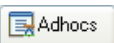


Figure 1-3: Customize Toolbars Dialog Box

2. Check the toolbar that you want to recover.
You can hide a toolbar by unchecking the name of the toolbar.
3. Change the location of the selected toolbar by selecting the desired position: **Left**, **Top**, **Right**, **Bottom**, or **Floating**.
If you select **Floating**, the toolbar has no set position; you can move it anywhere you like on the screen.
4. You can toggle the text under each icon in the toolbar on or off by selecting **Show Text** in the shortcut menu.
5. If you hover the mouse over an icon in a toolbar, the name of the toolbar is displayed. This is called a Tooltip or PowerTip. You can toggle this display on or off by selecting **Show Tooltip** in the shortcut menu.
6. Click **Apply** to apply your selection and see the effects.
7. Click **OK** to close the dialog box.

THREE QUERY TYPES

There are three query types, each of which provides a different view of your Analytics data.

- **Adhocs** report information from summary level data to detail level data.
- **Control Points** detect and report exception information.
- **Drill Downs** allow for a comparative analysis across stores and the chain.

Query Type	Description
 Adhocs	<ul style="list-style-type: none">■ All query types are based from an Adhoc. Adhocs report at all levels of data organization and provide the ability to link between Adhocs - as long as they have at least one field in common.■ Adhocs allow you to ask specific questions of the database so they are often referred to as What If analysis tools.■ For example, how many cash refunds did Rebecca Saunders ring last week?■ All query types can link to Adhocs for more detailed information.
 Drill Downs	<ul style="list-style-type: none">■ Drill Downs are summary level statistical reporting that is frequently used by management.■ This type of report follows your store operations hierarchy or another hierarchy supplied to the database. Statistics are rolled up for the various levels in the hierarchy, such as Division, Region, District, Store, and Employee.
 Controls	<ul style="list-style-type: none">■ Controls report exceptions that have exceeded a defined threshold value. Exceptions can be run by store, employee, or LP risk area.■ Controls maintain history to provide trending analysis. For example, you can track history for cashiers with excessive cash refunds or credit cards with multiple refunds by the same cashier.■ A red flag quickly identifies repeat offenders prompting you to review Exception History.■ A stoplight signals that an alert condition has been detected.

Query Structure

When you open your Query List, you will find it is organized by Library, Classification and then Query Name. This is done to help you quickly find the query and for security purposes.

Structure	Description
Library	The first level of organization involves Libraries. The XBR Loss Prevention Library is shown below.

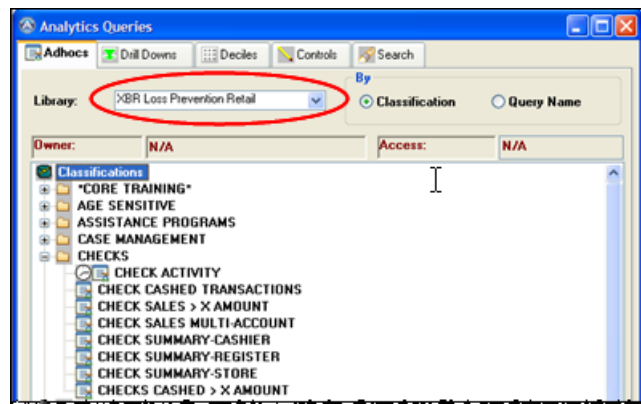


Figure 1-4: Query Structure - Library

Think of your Libraries as drawers in a filing cabinet. What are the advantages of having different drawers?

- Each drawer can hold a different type of file to keep you organized and to make retrieval quicker.
- You can lock each drawer separately allowing only certain people access to certain drawers.

The same principles apply to Libraries in your Query List.

Example: You can store all of your queries for the Loss Prevention department in the XBR Loss Prevention Library but put any queries you want your Sales department utilizing in a separate library. You can then give your sales staff access only to that Library. Except for your System Administrators, most users will only need access to one Library.

Note: Be careful with Libraries. A few can be helpful but resist the urge to make a separate Library for each staff member. A 200-drawer filing cabinet can be more confusing than helpful.

Structure	Description
Classification	<p>The next level of organization is Classifications. Since we have a large number of queries located in the XBR Loss Prevention Library, we needed to subdivide them. Think of your Classifications as the individual folders in the drawers of your filing cabinet.</p> <p>Example: In the example below, we have Classifications for Checks, Coupons and Credit Cards just to name a few. If you are looking for a query on Credit Cards, you can quickly locate the Credit Card Classification and find your query inside.</p> <p>Note the plus "+" sign next to each Classification. When you click on the "+" sign, you open the Classification and can view the queries located inside. The "+" sign changes to a "-" sign. You can click the minus "-" sign to close a Classification when you are not using it. This makes it easier to navigate around your Query List.</p>
Query Name	<p>Once you open a Classification, you will see the lowest level of organization; the Query Name. Each query is given a name that describes what information it will give you.</p> <p>Example: If you were looking for all check sales by cashier, you would open the Checks Classification and go to the Check Sales Summary - Cashier query.</p>

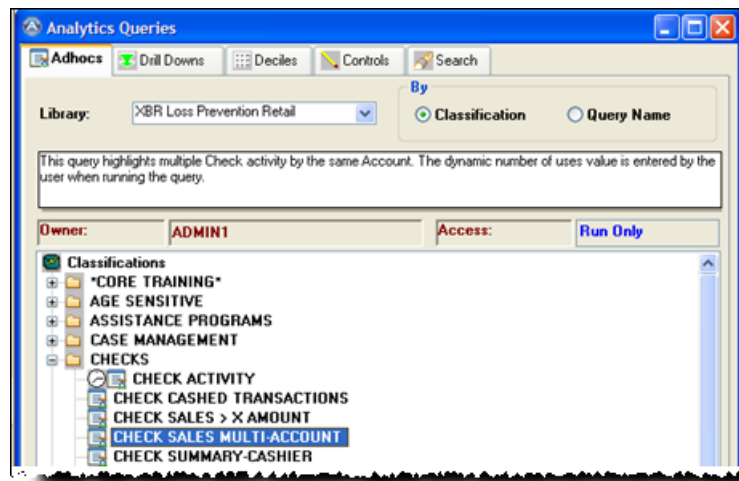



Figure 1-5: Query Structure - Query Name

USING ONLINE HELP

Online Help is delivered with Analytics to provide assistance at your fingertips while you are working in the application. There are two ways to access the online help: Click the **Help** button or press **[F1]**.

How to Access Online Help

1. Click the Help  button on the System Toolbar. The help window will display the help for the window you are currently in.
2. From here you can either use the Contents, Index or Search tabs to access the specific help information you are looking for.

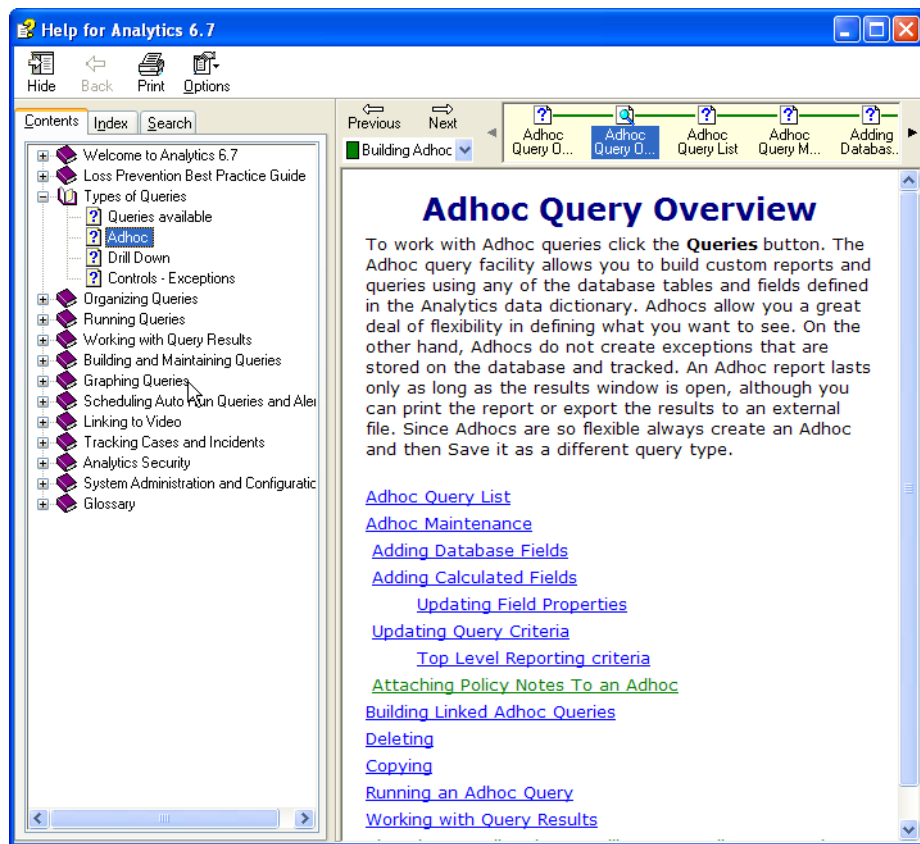


Figure 1-6: Online Help - Contents Window

If you are working with Adhocs, for example, and click the **Help** button; a screen similar to the one on above displays.

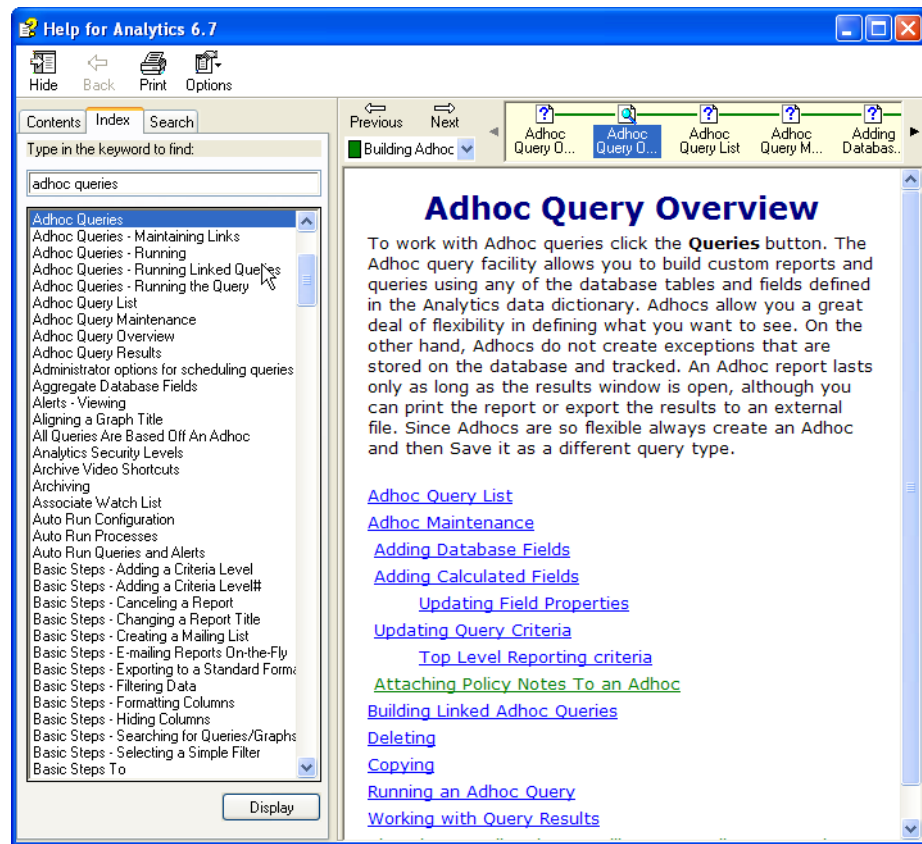


Figure 1-7: Online Help - Index Window

- a. To use the Index feature: type your topic (or a few letters of your topic) in the text box at the top; in the middle window you will get all forms of that word; all topics that contain those words anywhere in their explanation will display in the bottom window; click once on your desired topic in the bottom window and click **Display**; it will display in the window on the right.

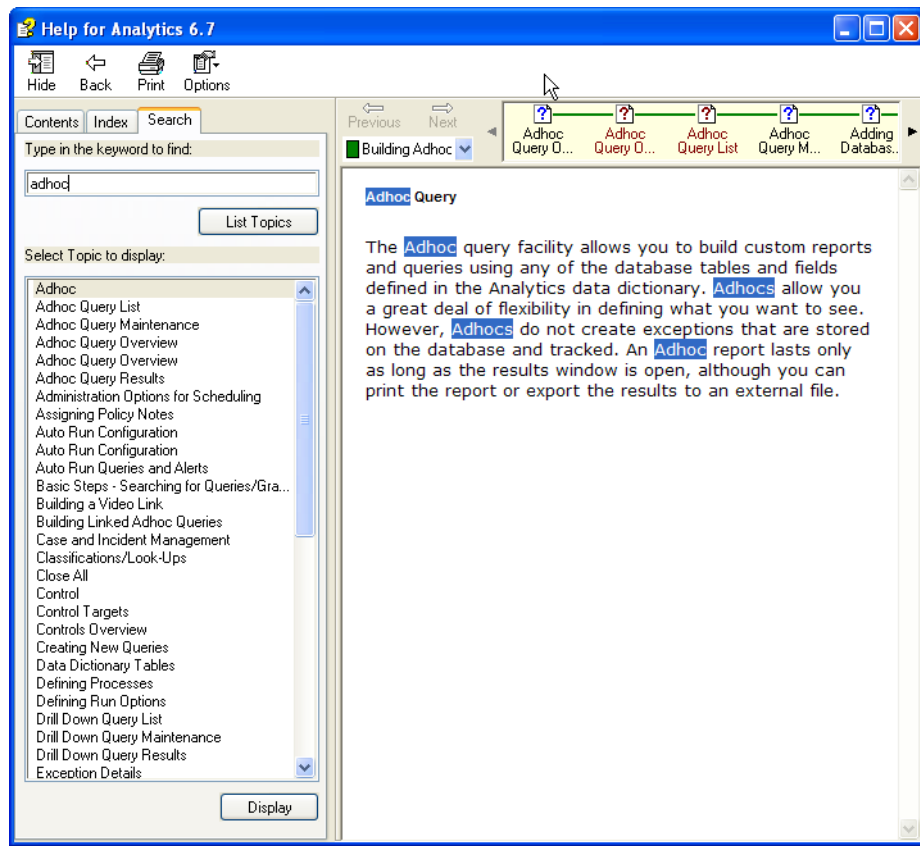



Figure 1-8: Online Help - Search Window

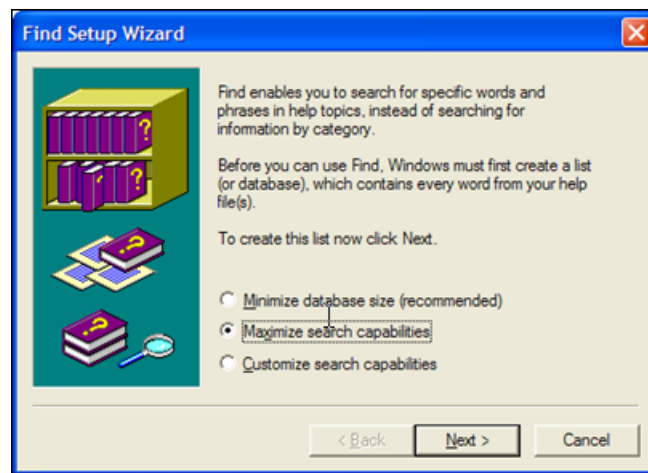
- b. To use the Search feature: type your search term in the text box at the top and click **List Topics**. All topics that match your search term are displayed in the middle window. Select a topic and click **Display**. Your topic will be displayed in the window on the right.

Chapter 1: Introduction

The first time you access the Search tab within online help a dialog box similar to the one shown below will display. Follow the steps below to maximize the Find function within help. You will only have to do this once.

The First Time You Access The Online Help

1. Click the **Help**  button and then click the **Search** tab.



2. Select "Maximize search capabilities" from the options.
3. Click the **Next** button. This will help to increase the search results when searching the online help database.
4. Click the **Finish** button.

CHAPTER

2

Accessing Queries

OVERVIEW

Queries can be accessed through the **Queries** button or the **Quick Run** screen. The **Queries** button gives Analytics users access to all available libraries of queries within their security rights. Users can run queries, reorganize the list of queries, access query notes and search for queries in this window.

The Quick Run screen provides shortcut access to queries and is more commonly used for frequently run queries. Analytics users can customize their Quick Run screens by adding, modifying and deleting tabs and category buttons. They can also customize the Quick Run screen by adding shortcuts to queries via category buttons. These Quick Run features and more will be reviewed in the Quick Run section.

LEARNING OBJECTIVES

Upon completion of this section, you should be able to:

- Organize queries by classification or query name
- Expand and collapse classifications
- Activate and deactivate query notes
- Search for a query

LOCATING QUERIES

Queries are organized by classifications within libraries (circled below). To display the XBR Queries window click the Queries button from the System toolbar. The XBR Queries window will display with four (4) tabs (Adhoc, Drill Down, Controls, and Search). The **Adhoc**, **Drill Down** and **Controls** tabs will allow you access these query types and the **Search** tab will allow a user to locate an existing query.

Classifications can be expanded or collapsed to list or hide existing queries. You can expand and collapse the folders under Classifications to locate any queries and graphs you would like to run. When a query name is selected, notes that describe the type of data returned for that query can be viewed above the list of queries.....

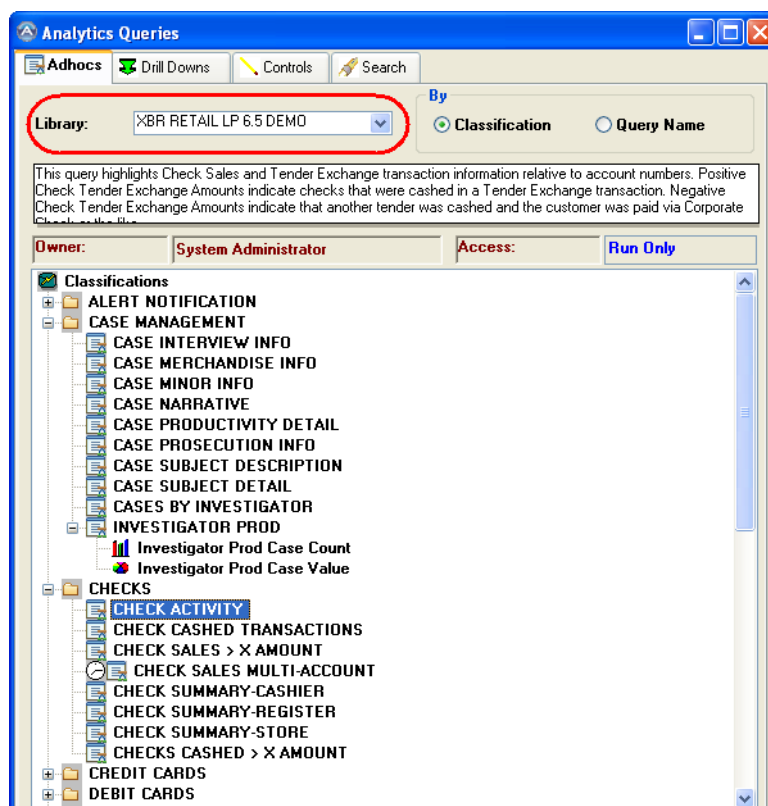


Figure 2-1: Queries Window

NAVIGATING THROUGH THE QUERY LIST

- Use the **Expand All** (circled below) button to review all available queries and graphs. The button changes to a **Collapse All** option allowing you to hide each query and graph.
- Click the plus sign "+" that displays before any classification or query to expand the item and view what is organized below it. Click the minus sign "-" to collapse an item.
- When queries display a plus sign "+", click the plus sign to view their related graphs.
- While you can double-click most items to expand or collapse them, double-clicking a query generates a report.
- A clock icon appears before any query or graph that is scheduled to run automatically. To learn how to schedule a query, refer to the Automating Queries section for more information.
- Graphs have an icon that represents the type of graph that will display such as a Pie, Column, or Bar graph.

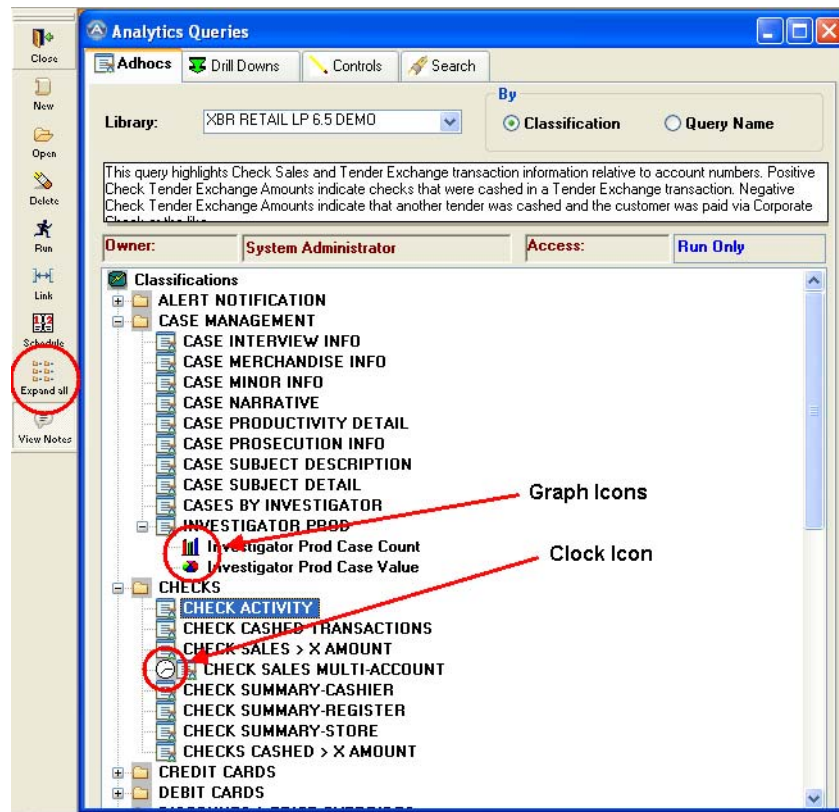


Figure 2-2: Query List Navigation

QUERY NOTES

Query notes identify the type of data results that will be returned when a query is run. To view the query notes, select the query name. The notes will automatically appear in the box above the queries list.

Click the **View Notes** button (circled below) to deactivate the query notes feature.

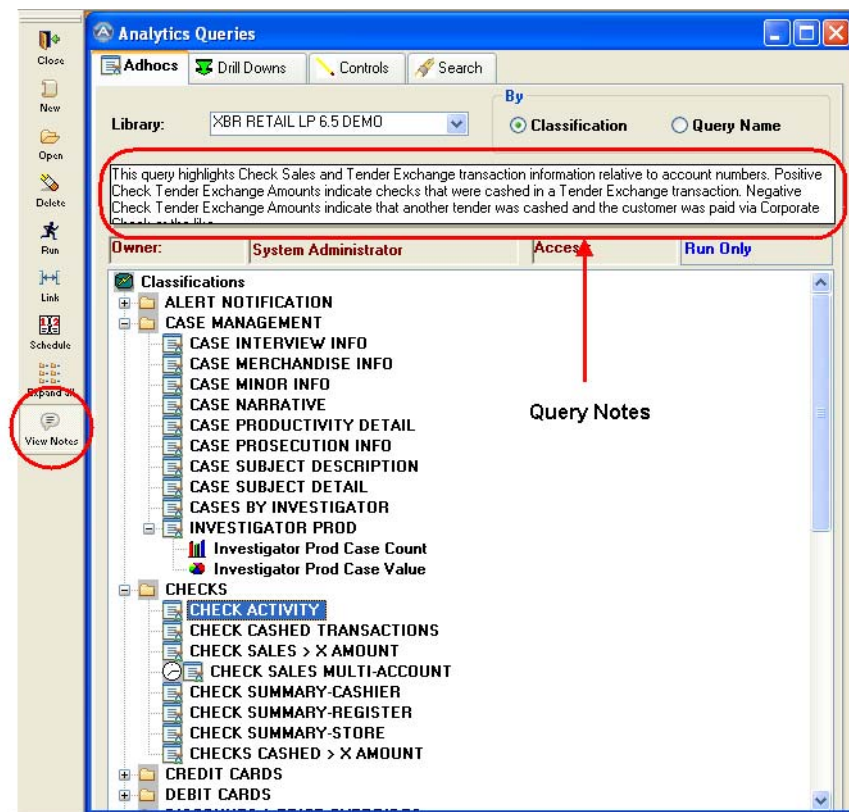


Figure 2-3: Query Notes

SEARCHING FOR A QUERY

The **Search** tab is used to quickly locate queries or graphs. Simply type a query name or any part of a query name in the **Name of Query to Search for** field, indicate which libraries and query types to look through, and then click the **Search** button.

For example, to find all queries which include Void in the query title:

1. Type Void in the **Name of Query to search for** field.
2. Check **Only search in this library** and select the desired library.
3. Select the query types you want to search for.
4. Click the **Search** button. The queries listed will be for the criteria you selected.

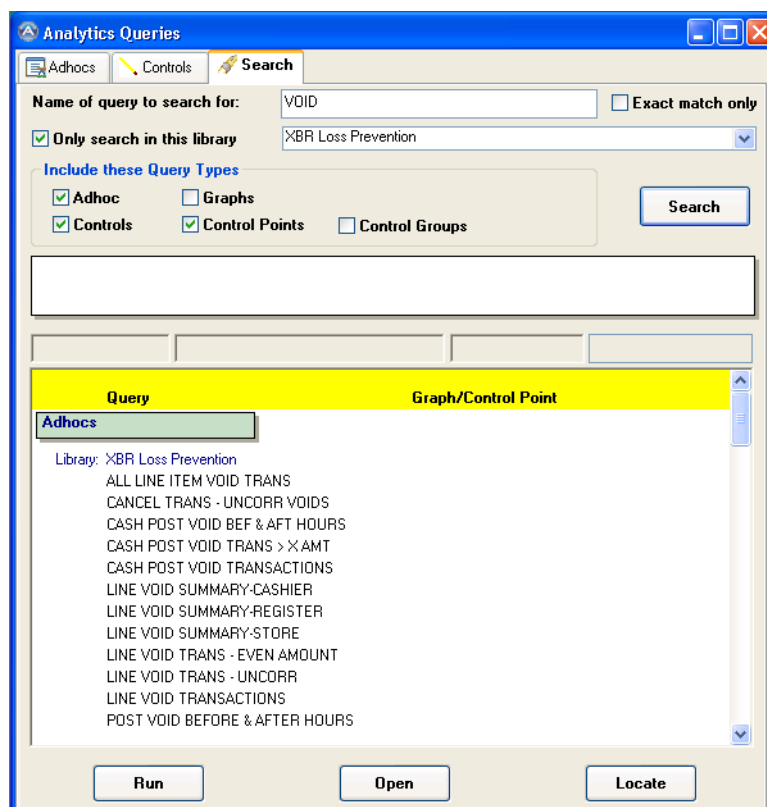


Figure 2-4: Query Window - Search

How to Search For A Query



1. Click the **Queries** button.
2. Select the **Search** tab.
3. Type a query name or part of a query name in the **Name of query to search for** text box.
4. **[OPTIONAL]** Check **“Only search in this library”** to limit your search to a specific library and select the library in which you want to search from the drop-down list.



The **“Exact match only”** option is helpful if you know the exact name of the query you are looking for.

5. Make sure *only* the types of queries you want are checked.
6. Click the **Search** button.
7. Use one of the following buttons to work with queries that match the search criteria you have defined.

Run Runs the selected query.

Open Opens the selected query so that you can modify it. Users must have system administrator rights or own the query to do this.

Locate Finds and selects the query in the tree view on the query type tab allowing you to run, modify, export or open the query.

CHAPTER

3

Running Adhoc Queries

OVERVIEW

This section will review how to run an Adhoc query. Once the run window is accessed, users can designate a time frame to run queries for, set parameters or prefilter criteria to help narrow query results. There are two (2) methods of accessing the run window:

- Double click a query name.
- Select a query name and then click the Run button located on the Window toolbar.

LEARNING OBJECTIVES

Upon completion of this section, you should be able to:

- Run a query
- Run a query offline
- Select a time frame
- Recognize and set parameters
- Specify criteria to prefilter query results
- Cancel a running query
- Run Top X level queries
- Pre Filter query results with Dynamic Groups

PROCEDURES

You can run queries and specify criteria to pre-filter the data that is returned to help narrow down your results. Each option within the table below is explained in detail later in this section.

How to Run An Adhoc Query



1. Click the **Queries** button.
2. Select the **Adhocs** tab to display the list of available queries.
3. Expand a Classification by double-clicking the folder or click the "+" sign.
4. Double-click a query to display the **Run Query** dialog box (see Figure 3-1).



Select a query and click the **Run** button to bypass the Run Query dialog box.

Run Adhoc Query CHECK SALES > X AMOUNT

Run

☒ Immediately ☐ Offline ☐ Notify

Description:

Specify Query Parameters

Amount >

Date Selection

Date Name:

Start Date:

End Date:

Specify Criteria

Column:	Store	Cashier	Register	Trans	Account
Criteria:					
Or:					

Top Level Reporting

Active ☐

Use Advanced Date Selection ☒

STARTDATE >= '2006-05-14' and
ENDDATE <= '2006-05-20'

Dynamic Grouping

Run **Cancel** **Help**

Figure 3-1: Run Query Dialog Box

5. Complete the options in the dialog box:

a. **Run:**

Immediately - The query will run and display the results on your screen in the results window.

Offline - The query can be run in the background and saved. This allows the you to access the results at anytime since the data is stored within the database and the application does not have to regenerate the data. The **My Reports** window will display the Adhocs run offline.

b. **Specify Query Parameters:**

Greater than or less than X allows you to report data over or under a certain amount or quantity.

Multi-use prompts allow you to report information, such as checking account numbers or credit card numbers that have been used multiple times.

Time prompts allow you to report information that occurred before or after a specific time.

c. **Date Selection** - Define the time period that you would like to represent in your query results. The Date Name area contains a list of pre-defined time frames. Commonly selected Date Names include: Yesterday, Last Week, Last 30 days. A custom time period can be selected instead of a date name by using the Start Date and End Date Options.

d. **Specify Criteria** - Pre-filters information on fields such as stores, cashiers, or account numbers. The columns that appear in this section vary depending on the report that is being used.

e. **Top Level Reporting** - The ability to display the top # of rows for a specific field that the user chooses.

f. **Dynamic Grouping** - Select a pre-defined list of groups (subset) of data to run the query against. A group can consist of specific stores, regions etc.

g. **Advanced Date Selection** - Enter a specific time period that was not available in the Date Selection list.

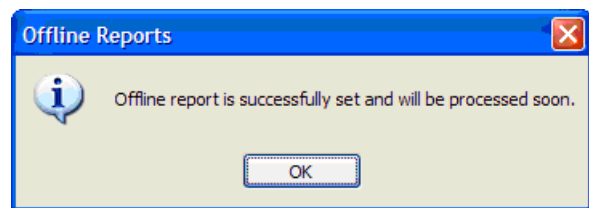
6. When you are finished selecting options, click the **Run** button. The query will run and display the results.

RUN OPTIONS

Run a query immediately or offline. Select **Immediately** to run the query and display the results on the screen select **Immediately**. Select **Offline** if you want to review the results at a later date or the query may take awhile to run. Selecting offline will run the query in the background and allow you to continue working. The report, along with the results will be sent to the My Reports window and you can open this report at a later time.

Run an Adhoc Offline

1. Select **Offline** (see Figure 3-1).
2. **[OPTIONAL]** Check **Notify** if you would like to receive a notification in the Analytics window when the query has run. This is recommended, so you know when the report is completed and in the My Reports window. Otherwise you will need to periodically check the My Reports window to see if the report has run.
3. Type a description in the **Description** text box. This will display in the My Reports window to help you identify the query.
4. Set the rest of the options for the query.
5. Click the **Run Offline** button. A confirmation message box is displayed (see right).
6. Click the **OK** button. The results will be sent to the My Reports window.

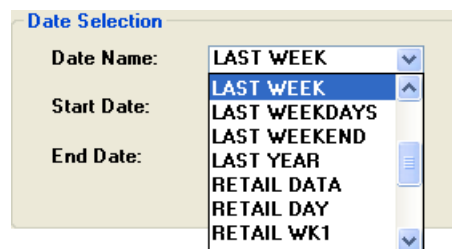


Benefits of running a report Offline

- You can run reports simultaneously
- You do not have to rerun a report for a specific time period to review the results. Reports are saved on the My Reports window until you delete them.
- If a report will take a couple minutes to run by running it Offline it frees up the application for you to continue your analysis by running other reports.
- Compare reports from week to week without having to rerun them.

DATE SELECTION

To identify the time period of a query click the down arrow in the **Date Name** area and then select a date range. The Date Names that appear in the drop down list were pre-defined during software installation. Your System Administrator can create additional Date Names, if needed.



Use the **Start Date** and **End Date** prompts to define a custom time period that does not appear as a Date Name in the drop down list.

How To Use a Custom Time Period



The custom time period that you select using the **Start Date** and **End Date** options takes precedence over the **Date Name** selection.

1. Click the down arrow in either the **Start Date** or **End Date** area. A calendar is displayed.

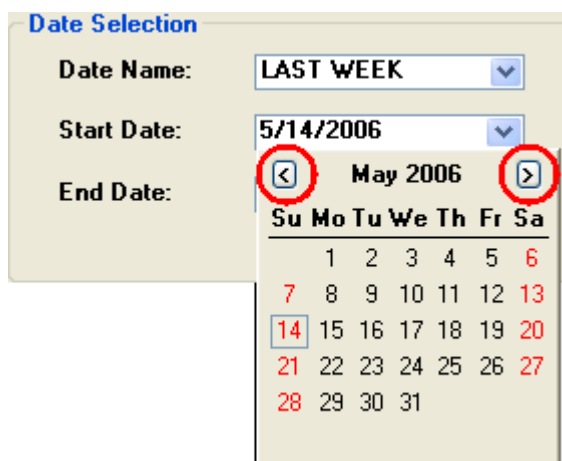


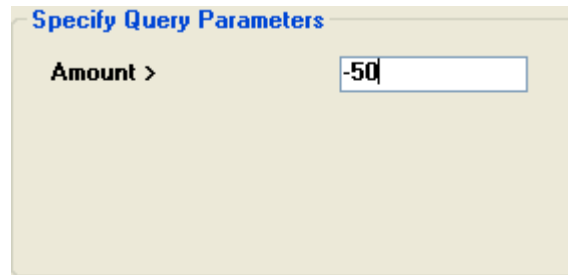
Figure 3-2: Custom Date Selection

2. **[OPTIONAL]** Use the arrows to display the month you would like to select from.
Use the left arrow to move to previous months and use the right arrow to move to more recent months.
3. Click on the day that you would like to use as either the start date or end date.

SPECIFY QUERY PARAMETERS

Specify Query Parameters allow you to identify a value as a method of filtering data in a query. For example, in a "Cash Refunds & Exch > X" parameter, the value might be -50. When the query is run, the results will be any Refund or Exchange greater than -50. The following is an example of some of the parameters that are available in some of the queries:

"Greater than X" parameters are used to report data over an amount or quantity you choose. When running the Cash Refund & Exch > X Amount enter the refund or exchange amount (as a negative) above which you want to research.



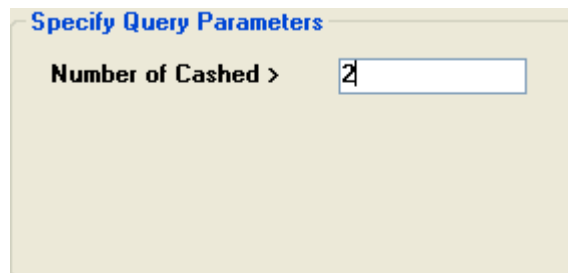
The screenshot shows a dialog box titled "Specify Query Parameters" with a light beige background. Inside, the text "Amount >" is followed by a text input field containing the value "-50".

Figure 3-3: Specify Query Parameters - Greater Than X



Refund dollars are expressed as negative numbers. In other words: -50.00 represents a refund of \$50.00.

Multi-use reports are used to display account numbers that have had multiple sales or refunds rung against them. You could also review Gift Certificates or Gift Cards that were sold and/or redeemed multiple times.

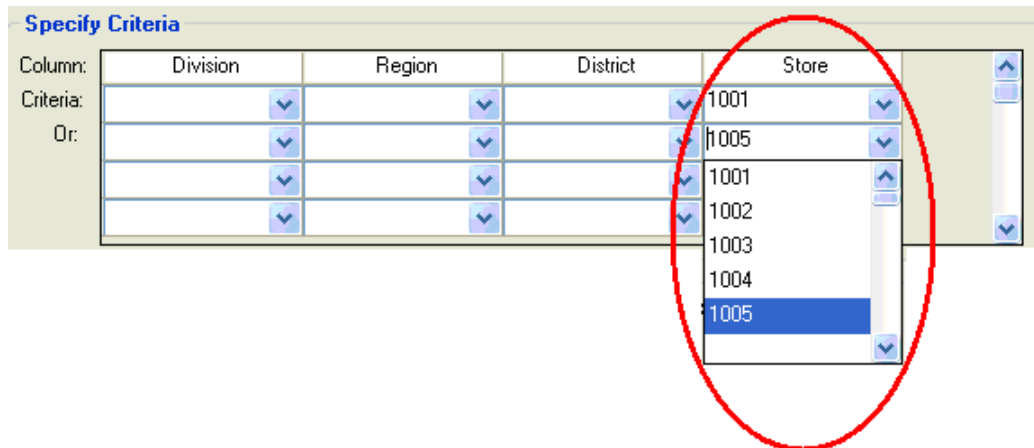


The screenshot shows a dialog box titled "Specify Query Parameters" with a light beige background. Inside, the text "Number of Cashed >" is followed by a text input field containing the value "2".

Figure 3-4: Specify Query Parameters - Multi-use

SPECIFY CRITERIA

The **Specify Criteria** section allows you to filter a query using report fields in an effort to narrow the query results. For example, instead of displaying data for all stores within your organization, you can enter specific store(s) to view in the query results.



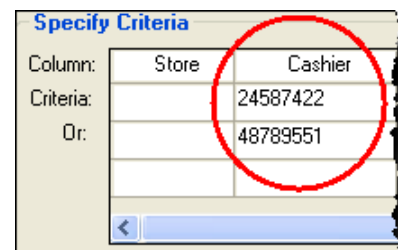
Column:	Division	Region	District	Store
Criteria:				1001
Or:				1005
				1001
				1002
				1003
				1004
				1005

Figure 3-5: Specify Criteria - Store List

The Store list in Figure 3-5 is a Dynamic lookup. The list is being populated from the database table instead of a lookup table. The benefit of the list being populated right from the database table is that it will always be up to date.

The example in Figure 3-5 would report all data for Stores 1001 *and* 1005.

The example to the right reports all activity for cashiers 24587422 and 48789551.



Column:	Store	Cashier
Criteria:		24587422
Or:		48789551

Run Adhoc Query NON-CASH REFUND&EXCH> X AMOUNT

Run
☒ Immediately ☐ Offline ☐ Notify

Description:

Specify Query Parameters
Amount >

Date Selection
Date Name:
Start Date:
End Date:

Specify Criteria

Column:	Store	Cashier	Register	Tender Type
Criteria:	15			
Or:				

Top Level Reporting
Active ☐

Figure 3-6: Specify Criteria - Tender Type

The example in [Figure 3-6](#) reports all Noncash Refunds & Exchanges for Store 15 for last week. The down arrow on the Tender Type box indicates a Lookup.

Lookup Tables translate database values into more meaningful text. In the example on the right, the text "Gift Card" will be listed in the query results instead of the database value, which could be "15."

TOP X LEVEL REPORTING

You can display a specific number of Top-level rows of data by using the Top Level Reporting section. Instead of running a query and getting back 500 rows of data, you can limit the number and only display the top 25 rows.

How to Select Top Level Reporting Options

1. Check the Active box in the Top Level Reporting section when running an Adhoc.
2. Then choose a field from the Top Level Field drop down box. The field you select from the list will be the field that is filtered and will only return the number of rows you type in the Top Level Rows: text box.
3. Select Ascending if you want the query results to be sorted ascending. Leave it unchecked if you want descending.
4. Type the number of rows in the Top Level Rows text box for the number of rows you want returned for the query results.



The number of rows returned may be a few more or less than what you entered in the Top Level Rows number box. The reason for this is if you specify a specific number to return, the data may have multiples for the field you choose in the top level reporting section. **For example:** If you choose to return the top 7 rows of data for the field Ref & Exch Amount in the Cash Refund and Exchanges Amount query you may get 8 rows returned (see [Figure 3-7 on page 35](#)). This occurs because there is more than one of the same amount (\$1.08). Instead of the application selecting which record to return it will return all the records that have the same amount and you end up with the top 8 instead of the top 7.

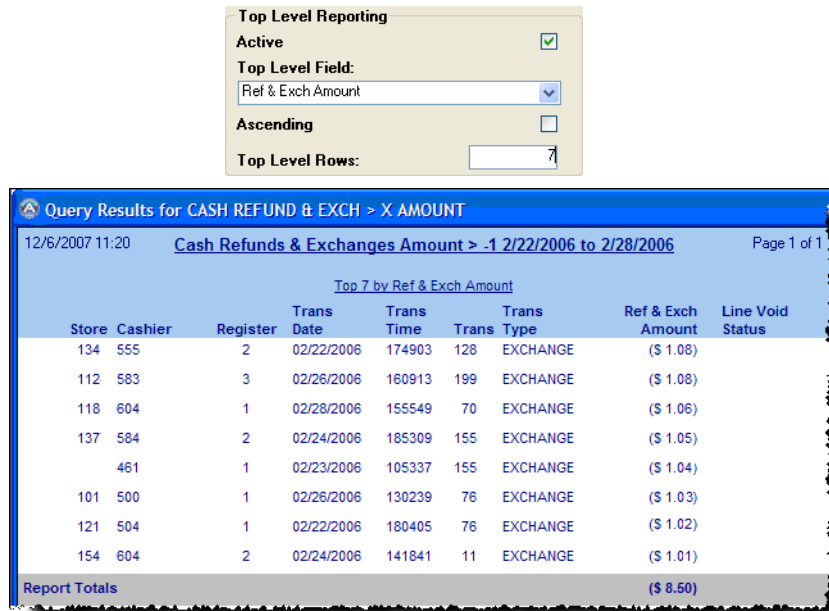
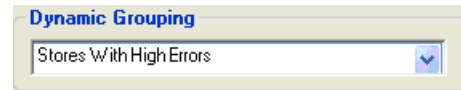


Figure 3-7: Top X Level Reporting

DYNAMIC GROUPING

A dynamic group is predefined criteria set up by a System Administrator for users to access and use as a filter option when running a query. There may be a group of Stores, Regions, or SKUs for which you or someone may need to consistently report on. Instead of manually entering the High Risk Stores within the Specify Criteria section, a group can be created using the Dynamic Group feature. If you choose to select a group from the list the query results will only report on that group. If you would like a list created for you please contact your Analytics System Administrator.




CANCELLING A QUERY FROM RUNNING

You can **Cancel** a query from completely running when you mistakenly run a query without selecting an appropriate time frame or without filtering on any criteria to limit results. In some instances, you may want to cancel a query mid-run because the results are accruing too many rows of data and canceling the run is the only method of interrupting the process. When a query is cancelled, Analytics will return the rows that it finished querying from the database and will discontinue retrieving any additional rows.

How To Cancel A Query

1. When running a query, wait until the **Running Query** dialog box appears. Notice how this window is counting the number of rows as they are being returned (see right).



2. Click the **Cancel** button.
 - The number of rows that were returned before the **Cancel** button was clicked displays in the lower left corner of the query window.
 - The **Stop** icon  appears in the lower, right corner of your screen indicating that the query currently displayed did not completely run.
 - Once you have canceled a query, you need to rerun it if you decide to display the entire query results after all.

C H A P T E R

4

Managing Query Results

OVERVIEW

Query results can be managed by sorting the data in ascending or descending order, filtering data to extract specific results and linking to other Adhoc queries for more detailed information. Sorting can occur within a single field or multi-level using the available fields within the query. Filtering can be accomplished using data values, text, lookups and wildcard characters. Both of these functions allow users to easily create customized and meaningful queries that can later be printed or exported for permanent referral.

LEARNING OBJECTIVES

Upon completion of this section, you should be able to:

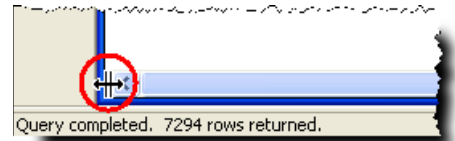
- Use Smart links to display additional details in a pop-up window
- Freeze the query results window
- Sort results in either ascending, descending, or multi-sort order
- Filter the data using values, text, lookups and wildcards
- Understand the Query Filter display window
- Link to other Adhoc queries for additional information
- Review Offline reports in the My Reports window
- Understand how Secure Account numbers (PCI) solution works if your company uses MICROS-Retails' solution


FREEZING COLUMNS IN WIDE QUERIES

When a query has too many columns to fit on the screen at the same time, it is helpful to freeze some columns on the left side of the screen. Users can then scroll the rest of the columns to the right while the descriptive columns remain in view on the left.

How To Freeze Columns

1. Point to the black space at the bottom, left corner of a query until the mouse pointer changes as shown in the figure to the right.



2. Drag and drop the mouse pointer () to the right to a position after the columns that you want to freeze.



A vertical line appears dividing the columns allowing you to scroll through the right window while freezing the left.

To un-freeze your columns, drag the black space back to the left margin as far you can.



If you are experiencing difficulty with this procedure, press **[Ctrl] + [End]** to move to the end of the query and attempt this procedure again.

Chapter 4: Managing Query Results

8/17/2009 11:32

Division	Region	District	Store Name	Sales Count	Sales Amount	CC Trans Count	CC Trans Amount	CC Trans Avg Amount	CC Trans Per Trans
2-Retail	East	Roberts	1059 Alexandria	1,129	\$ 34,776.21	182	\$ 7,457.05	\$ 40.97	16.12%
			1107 Baltimore	695	\$ 25,962.47	134	\$ 5,955.11	\$ 44.44	19.28%
			1191 Atlanta	630	\$ 17,591.66	72	\$ 2,276.71	\$ 31.62	11.43%
			1308 Grantsville	1,727	\$ 51,101.75	425	\$ 14,784.05	\$ 34.79	24.61%
			1336 Commack	516	\$ 21,807.46	104	\$ 5,787.53	\$ 55.65	20.16%
			1368 Stapleton	862	\$ 24,678.58	138	\$ 5,095.55	\$ 36.92	16.01%
			1377 Myrtle Beach	1,587	\$ 50,771.88	214	\$ 8,649.73	\$ 40.42	13.48%
			1517 Vero Beach	616	\$ 26,334.85	99	\$ 5,133.88	\$ 51.86	16.07%
			1540 Charlotte	1,040	\$ 37,858.72	244	\$ 10,848.82	\$ 44.46	23.46%
			1613 Newburg	636	\$ 20,887.88	49	\$ 2,284.30	\$ 46.62	7.70%
		Wilson	1087 Roanoke	380	\$ 9,955.54	23	\$ 782.82	\$ 34.04	6.05%
			1123 Brewster	904	\$ 29,807.00	194	\$ 8,116.32	\$ 41.84	21.46%
			1226 Toledo	524	\$ 16,237.13	69	\$ 2,638.31	\$ 38.24	13.17%
			1351 Kalamazoo	495	\$ 12,956.24	135	\$ 3,824.37	\$ 28.33	27.27%
			1364 Riverton	537	\$ 22,134.81	65	\$ 3,455.61	\$ 53.16	12.10%
			1366 Medford	219	\$ 7,899.97	26	\$ 1,292.67	\$ 49.72	11.87%
			1374 Millis	755	\$ 20,925.72	64	\$ 2,316.89	\$ 36.20	8.48%
			1636 Detroit	402	\$ 12,991.02	42	\$ 1,940.82	\$ 46.21	10.45%
		Watson	1007 Austin	438	\$ 13,874.57	57	\$ 2,094.23	\$ 36.74	13.01%
			1108 Harrisburg	792	\$ 22,338.65	96	\$ 3,431.01	\$ 35.74	12.12%

Figure 4-1: Freeze Columns

SORTING

There are TWO common ways to SORT queries once you have run them:

- Click a **column heading** to sort a query by that column in ascending order (lowest to highest or A-Z). Click the column heading again to sort the query by that column in descending order (highest to lowest or Z-A). When you point to a column heading, the mouse pointer will change to the shape of a hand.



- Use the **Sort** button to sort a query by multiple columns. A Sort dialog box displays the current sort order for the query. Prior to any sorting activity, the default sort order is listed on the right side of the window. After any sorting activity, the current sort order is listed on the right side of the window (Figure 4-2).

How To Perform a Multiple Column Sort in a Query

1. Click the **Sort** button. The Sort dialog box is displayed.

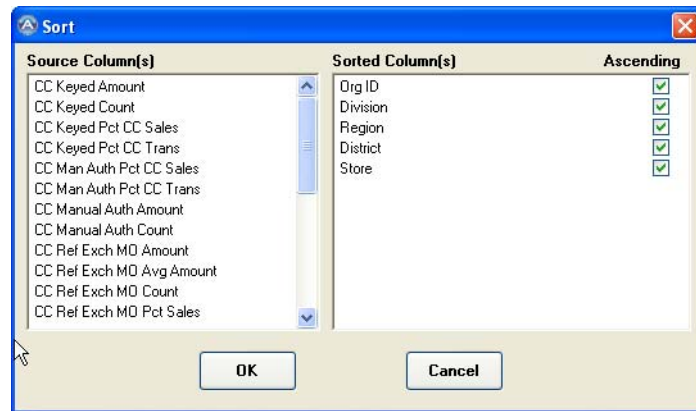


Figure 4-2: Sort Dialog Box

2. Drag the columns you want to use for sorting from the **Source Column(s)** area on the left to the **Sorted Column(s)** area on the right.
3. Click the **Ascending** check box to sort in ascending order or uncheck it to sort in descending order.
4. Click the **OK** button.
 - When you change the sort order using one of the methods mentioned above, you are making a *temporary* change. This sort order is applied until you either re-sort the query or close the query and re-run it.
 - The next time the query is run, the default sort order is applied, which was determined when the query was built.
 - System Administrators and System Managers can permanently modify the sort order of queries.

FILTERING

Filtering allows users to focus on a specific result of the query once the query has run. For example, you may have run a Post Voids by Cashier query and decided that a few cashiers with seemingly excessive Post Voids need further review. Rather than reading and printing the entire query, users can create a filter to focus on the cashiers with a higher number of post voids to investigate.

If you selected Top-level Reporting when you originally ran the query, the Top Level Reporting option appears active in the Filter dialog box. You can deactivate it at this time and create a new filter for all the data. If you create a filter with the Top-level reporting active the application will first filter all the data based on the filter you created and then it will apply the Top level reporting criteria within the filtered data.

How To Filter on Query Results



1. Click the **Filter** button. The Filter dialog box opens.
2. In the **Column Name** area, select the column on which you will base your filter.
3. In the **Operator** area select an expression (=, <, >, >=, in, not in, etc.).
4. In the **Value** area, enter the desired value(s).
5. **[OPTIONAL]** Select "And" or "Or" to add another filter.
6. **[OPTIONAL]** Repeat steps 2 through 4 to complete the additional filter.
7. **[OPTIONAL]** If you want to display the top-level records based on a certain field, activate the **Top Level Reporting** check box.
 - a. Choose a **Top Level Field** on which to report top-level data.
 - b. Select **Ascending** or leave blank for descending.
 - c. Type in the number of rows to be returned in the **Top Level rows** box.
8. Once you have completed building your filter(s), click **OK** to display the query results with your changes.

Simple Filter and Top Level Reporting Filter

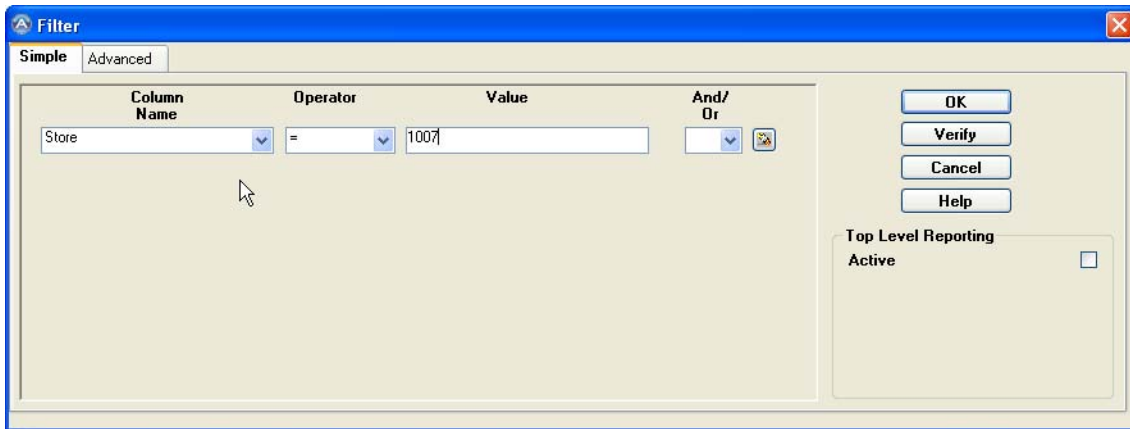


Figure 4-3: Filter - Simple



If you activated the Top Level Reporting option, the Simple filter is applied first for all of the data and the Top Level Reporting filter is applied next within the filtered data.

Combining Filters

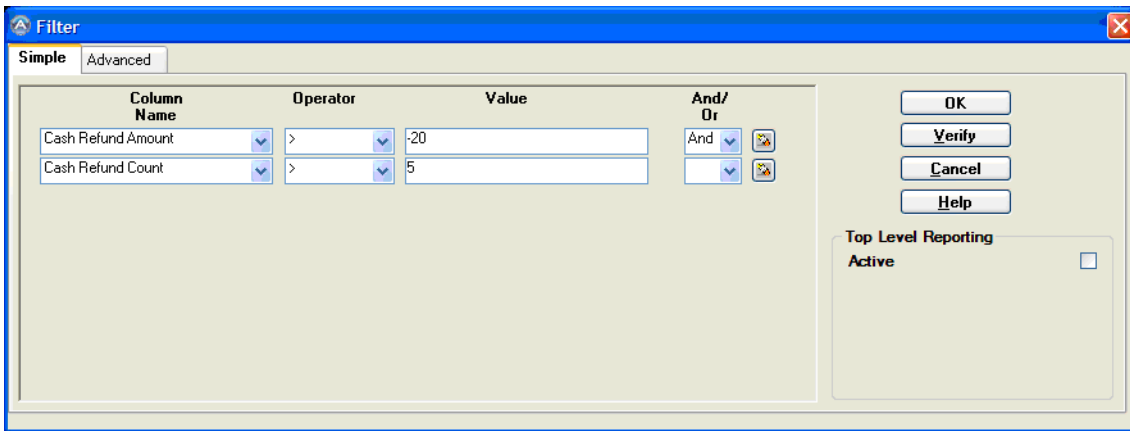


Figure 4-4: Filter - Multiple

Filtering on Lookup Values

Report columns such as tender types, reason codes, and swipe flags are often listed in Tlog files as cryptic codes. Analytics converts these codes into meaningful text descriptions in your query results using a Lookup. When filtering on a Lookup, the Value field displays a down arrow that allows users to easily select the appropriate options for the filter.

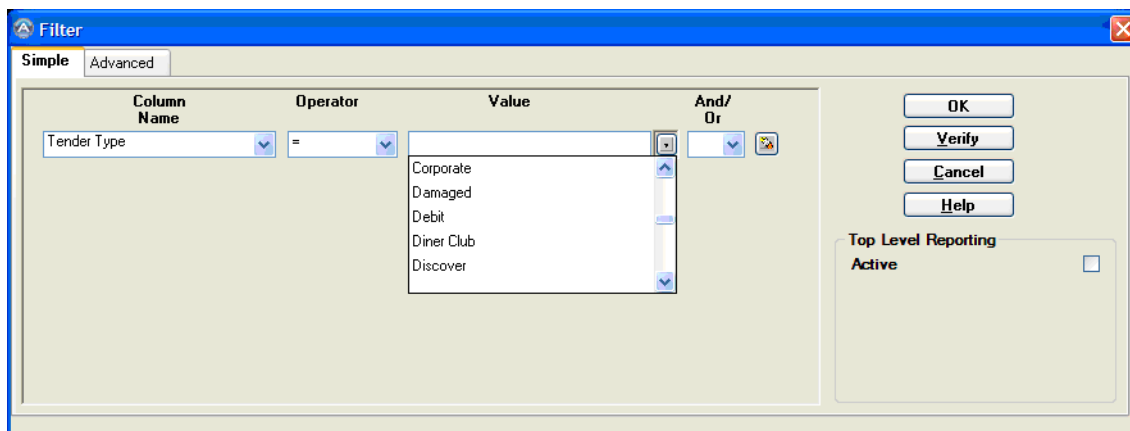


Figure 4-5: Filter - Lookup Values

CLEARING A FILTER

Once you have created a filter, you can easily re-display the entire query results by clearing any existing filters. *You do not need to take the time to exit your query and re-run it!* Simply click the **Filter** button and then click the **Erase** button (circled below) for each filter that has been created. Once you have cleared all the filters, click **OK**.

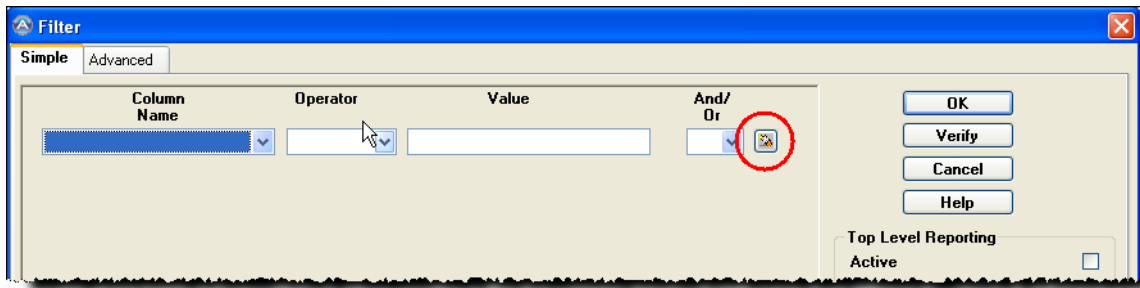


Figure 4-6: Filter - Erase

If you selected **Top Level Reporting** before running a query, this filter can be cleared as well via the Filter function. Deactivate the Top Level Reporting by de-selecting **Active** in the Filter window. All rows of data will be returned to the query results. You can reactivate the Top Level Reporting filter at any time using the Filter function.

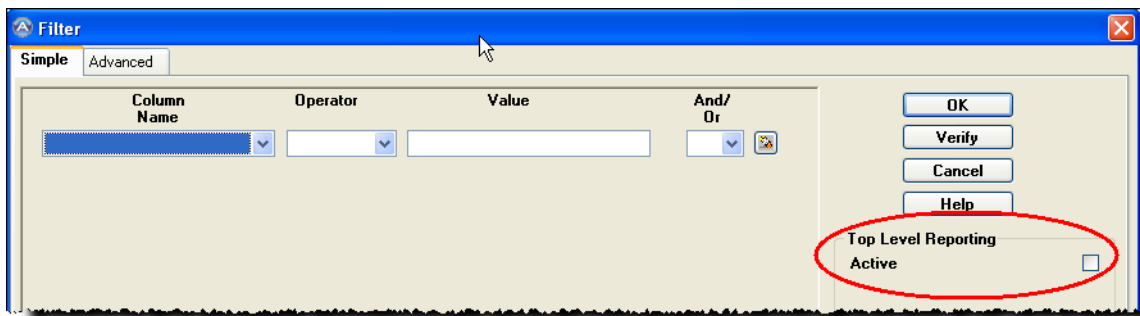


Figure 4-7: Filter - Top Level Reporting

BUILDING ADVANCED FILTERS

You can filter data that displays on a query in order to hide rows on the query and display only those records you are interested in. Only data that meets the criteria of a filter appears in the query results. If you selected Top-level Reporting when you originally ran the query, the option will be active in the **Filter** dialog box. You can deactivate it at this time and create a new filter for all the data, or you can leave it active and create a filter on the Top X records only. If you create a filter with the Top-level reporting active the application will first filter all the data based on the filter you created then it will apply the Top level reporting criteria within the filtered data.



The number of rows returned may exceed the number you entered in the Top-level Rows box.

How to Build Advanced Filters

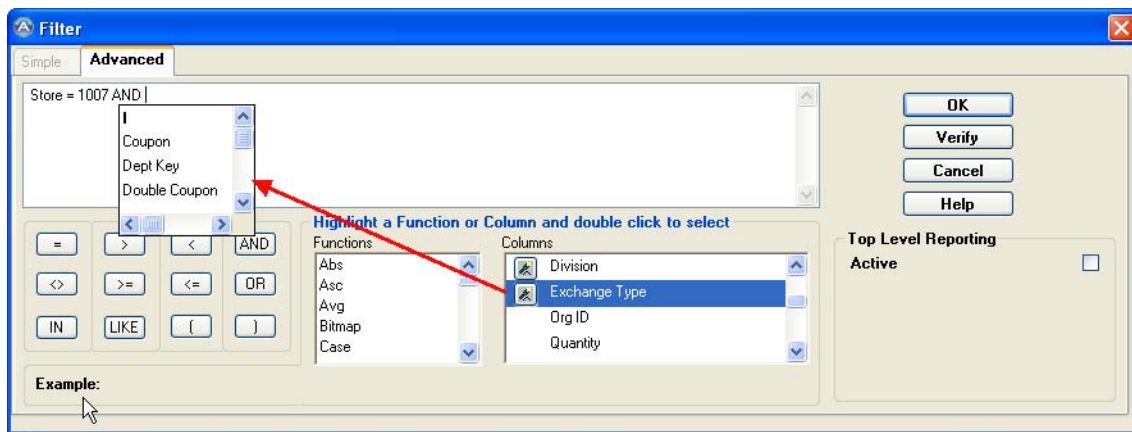




Figure 4-8: Advanced Filter - Lookup Values

1. Click the **Filter**  button to filter the results of a query.
2. Select the **Advanced** tab.
3. In the **Columns** area, double click the column name on which you would like to base your filter. It appears in the white text box.
4. Type an expression or click an expression button (=, <, >, >=, in, not in, etc.).
5. Type a value or values to finish the filter. If the field in the **Columns** area is a lookup field, it will have a **Lookup**  button next to it. Click this button once to display appropriate options to select (Figure 4-8).

6. **[OPTIONAL]** Enter "AND" or "OR" to add another filter.
7. **[OPTIONAL]** Repeat steps 2 - 4 to complete this additional filter.
8. **[OPTIONAL]** Activate **Top Level Reporting**.
9. Once you have created all desired filters, click **OK**.

Common Filters

This Filter ...	Reports This Information:
Store number = 11	Store 11 only.
Store number in (4, 6, 39)	Stores 4, 6, and 39
Refund amount < -150	Refunds over \$150.
Goal % > 5%	All Stores, regions, or districts that exceeded their goal dollars by more than 5%.
Trans Date > 10/01/08	Transactions after October 1, 2008.
Trans Time > 1300	Transactions after 1:00.
Job Code = PT	Job Code field equals PT for Part Time.
Account Number Like 6011%	Account number starts with 6011.
Account Number Like %56%	Account number has 56 anywhere in the number.
Account Number Like %34	Account number ends in 34.

Operators Used in Filters

Some of the most common filtering commands are:

<>	Not equal to
=	Equal to
<	Less than
<=	Less than or equal to
>	Greater than
>=	Greater than or equal to
In ()	Used to list a group of valid values Example: Store number in (1,5,7,8). Note that parentheses are used around multiple values.
Not In ()	Used to exclude a group of values Example: Store number not in (2,3,4,6). Note that parentheses are used around multiple values.
Between	Used to specify a range of valid values. Example: Store number between 1 and 8.
Like	Used as a wild card to return similar values Example: SKU like 123% would display all SKUs beginning with 123 and ending with anything.
Not Like	Used as a wild card to exclude similar values Example: SKU not like 123% would return all SKUs that did not begin with 123.
And	Used to combine filters. Each row that appears on the query must meet the criteria of each filter combined with And. Example: Refund_amount < - 50 and Store num = 16 would return all refunds greater than \$50 that occurred in Store 16.
Or	Used to combine filters. Each row that appears on the query must meet the criteria of at least one filter combined with OR. Example: Store num = 3 or Store num = 16 would return all rows from Store 3 and Store 16.

COMBINING FILTERS

You can combine filters to further narrow down data. You can use the "AND" or "OR" statements in a filter. Depending on which you use will determine on how much data is retrieved.

Connecting Filters by AND

In order for data to appear on your query, it must meet the criteria of *ALL* filters connected by "and".

If you create a filter like this:

Store = 15 AND number of units > 10

These lines *would* appear on your report:

Store	Trans Date	Number of Units	Total Amount
15	1/1/08	11	\$2200
15	1/2/08	15	\$1500

These lines *would not*:

Store	Trans Date	Number of Units	Total Amount
15	1/1/08	10	\$1000
20	1/2/08	15	\$1500

Connecting Filters by OR

In order for a line to appear on your report, data must meet the criteria of *at least one* filter connected by or.

If you create a filter like this:

Store = 15 OR number of units > 10

These lines *would* appear on your report:

Store	Trans Date	Number of Units	Total Amount
15	1/1/08	11	\$2200
15	1/1/08	8	\$800
18	1/2/08	12	\$3600

These lines *would not*:

Store	Trans Date	Number of Units	Total Amount
5	1/1/08	10	\$1000
20	1/2/08	5	\$1500

QUERY FILTER DISPLAY



The **Query Filter Display** button displays parameters and criteria that were set for the query. When you are viewing the results of a query it is not apparent as to what options were set in the Run Query dialog box. By clicking the **Query Filter Display** button the options that were set for the query will display. If you run the query and then set a filter, the filter will display in the Filter section of the Query Filter Display window.

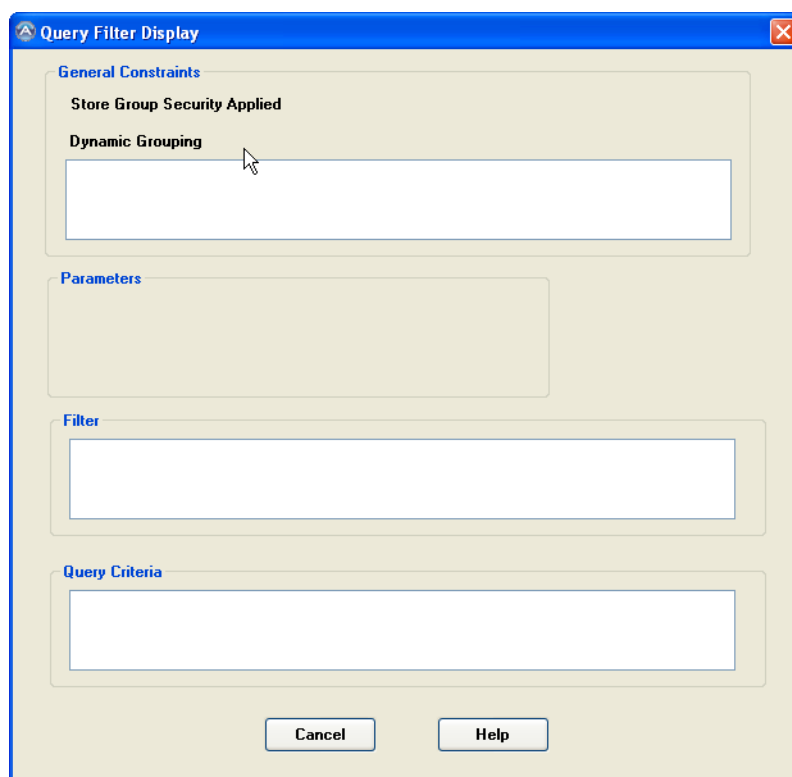
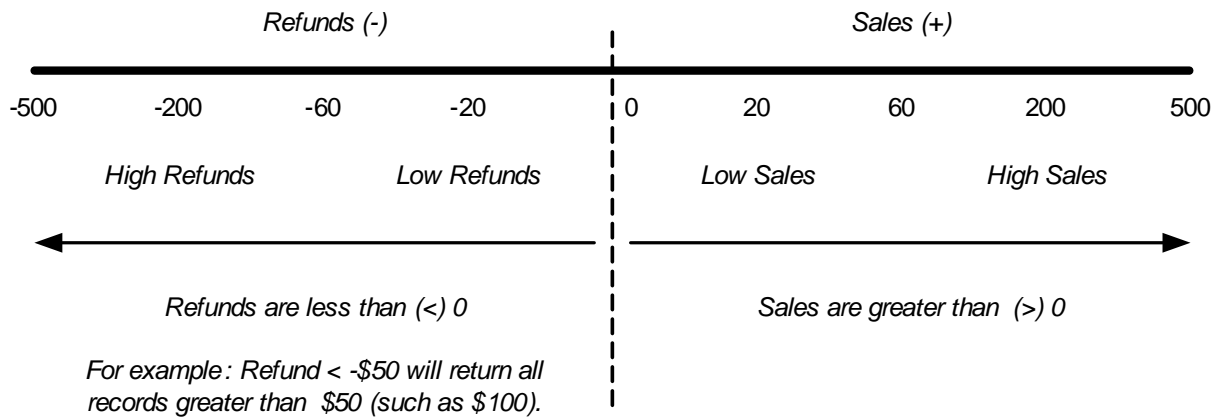


Figure 4-9: Query Filter Display

When you export the results of a query in the following formats, the Query filter options selected will display at the end of the report: Analytics PSR, PDF, or HTML. The other formats will not show you what was set as options when the query was run. See the Print and Export Query Results section for more information.

Refresher on Using a Number Line

When running queries and creating filters, it can be helpful to think about a number line so that you remember how to work with sales and refunds. This will also help you remember whether to use the greater than ($>$) or less than ($<$) sign when filtering.



SMART LINKS

Smart links provide additional detailed information about specific fields, which are displayed in a pop up window. As you move the mouse over data results in a query, a shadow box will display over Store, Cashier and/or Register number. Right-click the shadow box and a pop up window will display detailed information from the Store, Employee and/or Register master files for the corresponding field. If your environment is configured to do so, you can also link directly to an Adhoc details query from the Account number and Transaction number fields when available by right clicking when the shadow box appears.

Query Results for CREDIT CARD ACTIVITY

8/17/2009 16:17 [Credit Card](#)

Store	Cashier	Cashier Last Name	Register	Trans Date	Trans
300	40443	Hamilton	2	05/15/2006	65691

Division: Outlet

Store Number: 300

Store Address1:

Store Address2:

Store City: New York

Store State: NY

Store Zip Code: 12015

Store Telephone: 8005551212

Region Number: Central

District Number: Robinson

Store Manager: Dana Reed

Store Volume Group: 2

Last Inventory Date: 9/15/2004

Last Shrink Percentage: 2.91%

1	05/15/2006	65722
---	------------	-------

Figure 4-10: Smart Link for Store

LINKING BETWEEN ADHOCS

Linking allows users to review associated queries based on the results of another query.



When reviewing query results, users can link to another query if the **Link** button is displayed on the **Window** toolbar. If the **Link** button is displayed, it indicates that at least one linked query has been defined for the selected query. Queries can be linked to each other if there is at least one common field shared between them.

Linking Between Queries

How to Link to Another Query

1. Double-click a row in your query.
If there is only one link for the query, the linked query is automatically displayed.
2. If there is more than one link, a dialog box listing the links is displayed.

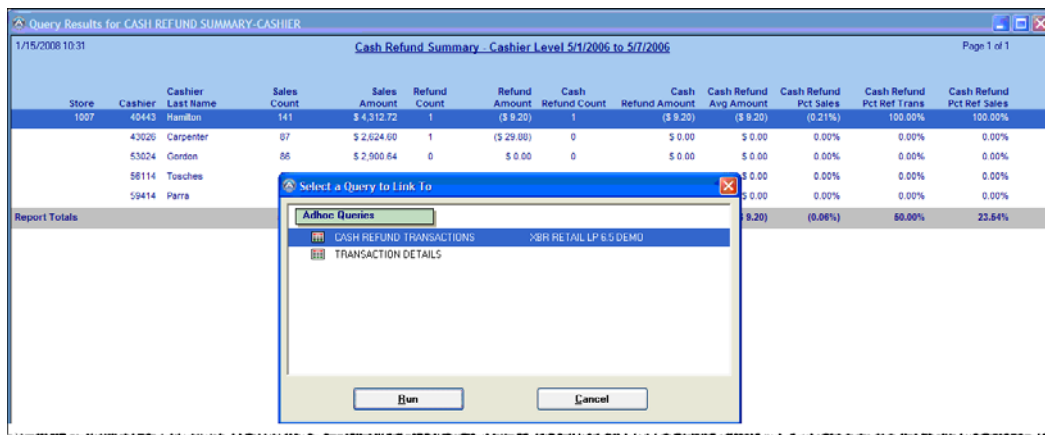


Figure 4-11: Query with Multiple Links

3. Select the query to link to. The information within the selected row will be represented in the linked query.

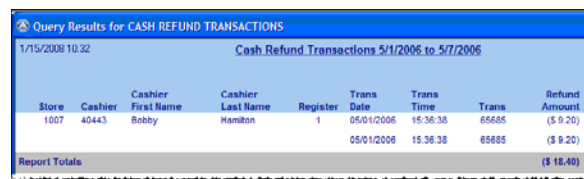
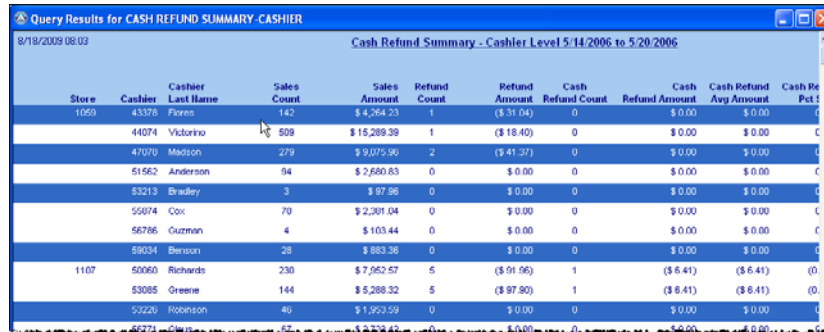


Figure 4-12: Linked Query

Link on Multiple Rows That are Non-adjacent

1. Click in the first row that you would like to investigate.
2. Hold the **[Ctrl]** key down while you click each additional row that you would like to investigate.



Store	Cashier	Cashier Last Name	Sales Count	Sales Amount	Refund Count	Refund Amount	Cash Refund Count	Refund Amount	Cash Refund Avg Amount	Cash Refund Per Item
1059	43378	Flores	142	\$ 4,264.23	1	(\$ 31.04)	0	\$ 0.00	\$ 0.00	0
	44074	Victorino	509	\$ 15,289.39	1	(\$ 18.40)	0	\$ 0.00	\$ 0.00	0
	47070	Madison	279	\$ 9,075.96	2	(\$ 41.37)	0	\$ 0.00	\$ 0.00	0
	51562	Anderson	94	\$ 2,680.83	0	\$ 0.00	0	\$ 0.00	\$ 0.00	0
	53213	Bradley	3	\$ 97.96	0	\$ 0.00	0	\$ 0.00	\$ 0.00	0
	55874	Cox	70	\$ 2,381.04	0	\$ 0.00	0	\$ 0.00	\$ 0.00	0
	56786	Guzman	4	\$ 103.44	0	\$ 0.00	0	\$ 0.00	\$ 0.00	0
	58034	Benson	28	\$ 883.36	0	\$ 0.00	0	\$ 0.00	\$ 0.00	0
1107	50060	Richards	230	\$ 7,852.57	5	(\$ 91.96)	1	(\$ 6.41)	(\$ 6.41)	0
	53085	Greene	144	\$ 5,288.32	5	(\$ 97.90)	1	(\$ 6.41)	(\$ 6.41)	0
	53220	Robinson	40	\$ 1,953.59	0	\$ 0.00	0	\$ 0.00	\$ 0.00	0
	55924	...	67	\$ 2,729.42	0	\$ 0.00	0	\$ 0.00	\$ 0.00	0

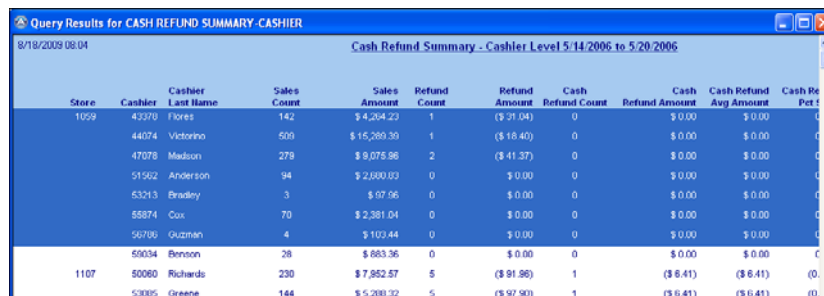
Figure 4-13: Multiple Non-Adjacent Rows

Release the **[Ctrl]** key when the last row has been selected.

3. Click the **Link**  button.

Linking on Consecutive Rows

1. Click in the first row that you would like to investigate.
2. Hold the **[Shift]** key down as you click the last row in the list that you would like to investigate.



Store	Cashier	Cashier Last Name	Sales Count	Sales Amount	Refund Count	Refund Amount	Cash Refund Count	Refund Amount	Cash Refund Avg Amount	Cash Refund Per Item
1059	43378	Flores	142	\$ 4,264.23	1	(\$ 31.04)	0	\$ 0.00	\$ 0.00	0
	44074	Victorino	509	\$ 15,289.39	1	(\$ 18.40)	0	\$ 0.00	\$ 0.00	0
	47070	Madison	279	\$ 9,075.96	2	(\$ 41.37)	0	\$ 0.00	\$ 0.00	0
	51562	Anderson	94	\$ 2,680.83	0	\$ 0.00	0	\$ 0.00	\$ 0.00	0
	53213	Bradley	3	\$ 97.96	0	\$ 0.00	0	\$ 0.00	\$ 0.00	0
	55874	Cox	70	\$ 2,381.04	0	\$ 0.00	0	\$ 0.00	\$ 0.00	0
	56786	Guzman	4	\$ 103.44	0	\$ 0.00	0	\$ 0.00	\$ 0.00	0
	58034	Benson	28	\$ 883.36	0	\$ 0.00	0	\$ 0.00	\$ 0.00	0
1107	50060	Richards	230	\$ 7,852.57	5	(\$ 91.96)	1	(\$ 6.41)	(\$ 6.41)	0
	53085	Greene	144	\$ 5,288.32	5	(\$ 97.90)	1	(\$ 6.41)	(\$ 6.41)	0

Figure 4-14: Multiple Adjacent Rows

3. Click the **Link**  button.

- When linking, you will go *directly to the next query* if there is only ONE query to link to.
- When there is a choice of queries to link to, *a selection list is displayed* similar to the one below. Double-click the query you would like to run or select it and click the **Run** button.

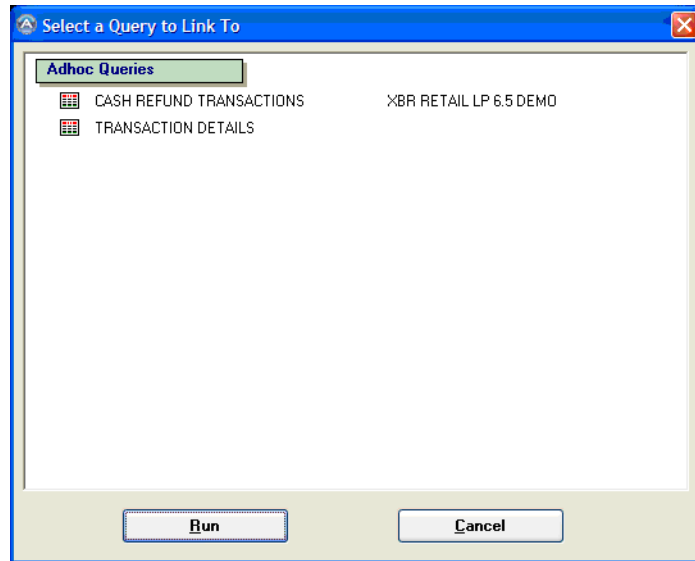
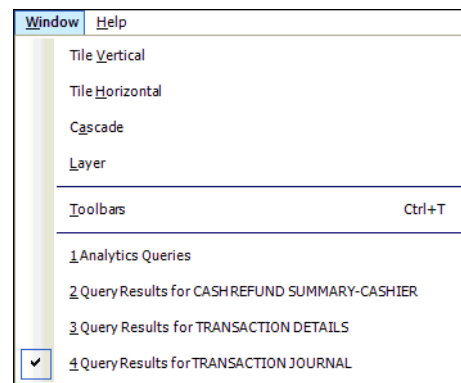


Figure 4-15: Multiple Queries

- Depending on the options defined for the link, *you may be prompted for a date range or criteria* for the linked query.
- The *linked query results display in their own window* separate from the original query results window, you can use the Window menu on the System toolbar to switch back and forth between the queries. The queries are listed in the order they were run.
- The linked query results have the same functionality as the original results, including sort, filter, print, export, and the ability to link to additional queries.
- Close the results window or press the **[Esc]** key *to exit from a linked query* and return to the original query.



LINKING TO VIDEOS

Review Video

There are two ways a transaction video can be reviewed: Archive Video or the Video Queue.

Video Queue

Use the following steps to review a transaction video in the Video Queue:

1. Select **Video Queue** from the Options menu.
2. View a transaction video by:
 - Double-clicking a video shortcut, or
 - Selecting a shortcut and clicking **Run Video** in the side toolbar, or
 - Selecting a shortcut and selecting **Run Video** from the Options menu.

The video will be run using the third party video viewer and it runs for the time frame that is listed on the shortcut.

The start time and/or end time can be changed to view a clip before the transaction began and/or after the transaction was rung.

Closing the Video Queue without saving erases all shortcuts currently in the queue. Re-running the query restores access to the Video Link.

Video Archive

Use the following steps to review a transaction video in the Video Archive:

1. Select **Video Archive** from the Options menu.
2. View a transaction video by:
 - Double-clicking a video shortcut, or
 - Selecting a shortcut and clicking **Run Video** in the side toolbar, or
 - Selecting a shortcut and selecting **Run Video** from the Options menu.

The video will be run using the third party video viewer and it runs for the time frame that is listed on the shortcut.

Video Queue

The video queue can be used to temporarily save shortcuts to transaction videos or to review transactions. Video shortcuts can also be archived from the video queue. Each user that reviews transactions has his/her own video queue.

1. To further investigate suspicious looking transaction(s), review a video link by either:
 - Double-clicking a single transaction, or
 - Using the **[Ctrl]** key to select multiple transactions and then clicking **Link** on the side toolbar.

The system displays the Select a Query to Link To window.

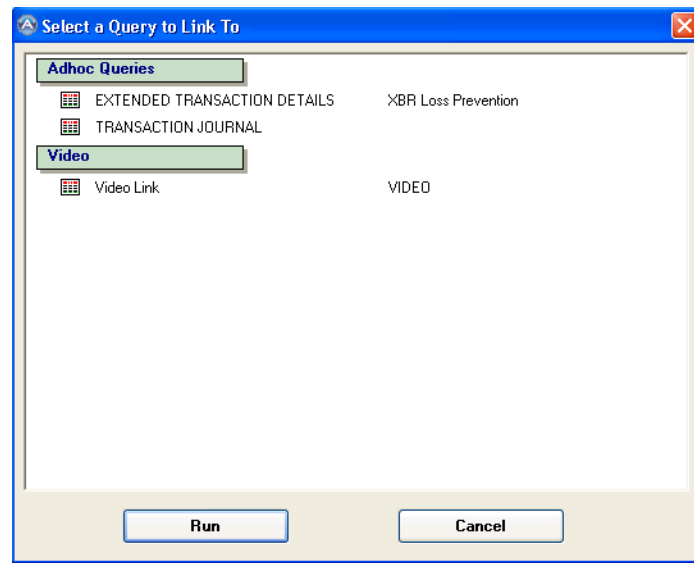


Figure 4-16: Selecting Transactions to Review a Video Link

2. Double-click **Video Link** to display the Video Queue. Each line is a shortcut to the related video for the transactions selected, where:
 - *Start time* = The start time of the transaction captured by POS. Enter a start time prior to the transaction to begin the video before the transaction began.
 - *End time* = The end time of the transaction. The system calculates the end time when POS does not capture it. Enter an end time later than the transaction end time to review video after the transaction was rung.
 - *Video run* = **Y** displays after a video has been reviewed in the queue.
 - *Video site and camera* = A register is matched to a store using Table Editor. A video site is matched to a camera number.



Camera information is maintained by the System Administrator in the Table Editor program.

Chapter 4: Managing Query Results

3. If desired, the Start and Stop Times can be changed.
 - a. Click in the field to be changed.
 - b. Make the desired change.
 - c. Click Save in the side toolbar to save the changes.

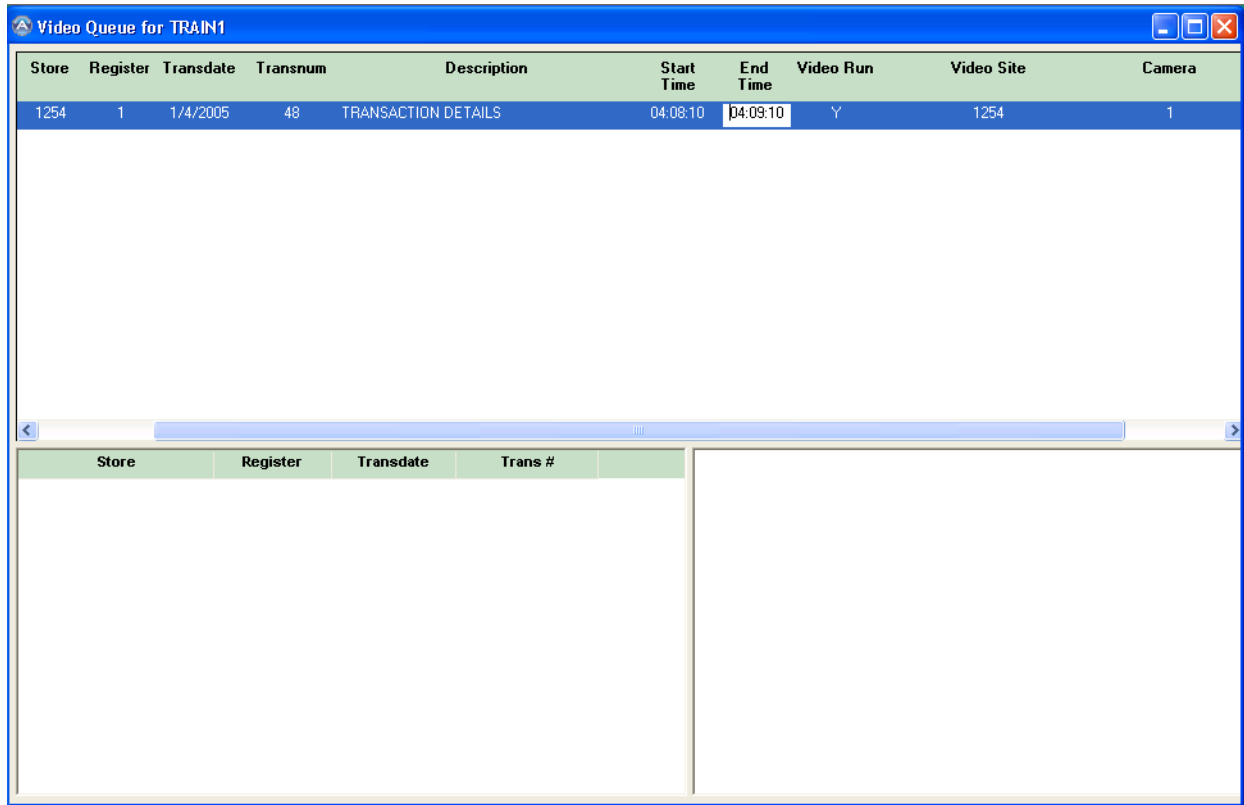


Figure 4-17: Video Queue - Shortcuts to Transaction Videos

Transaction details can be viewed by clicking **View Detail** in the side toolbar or selecting **View Detail** from the Options menu.

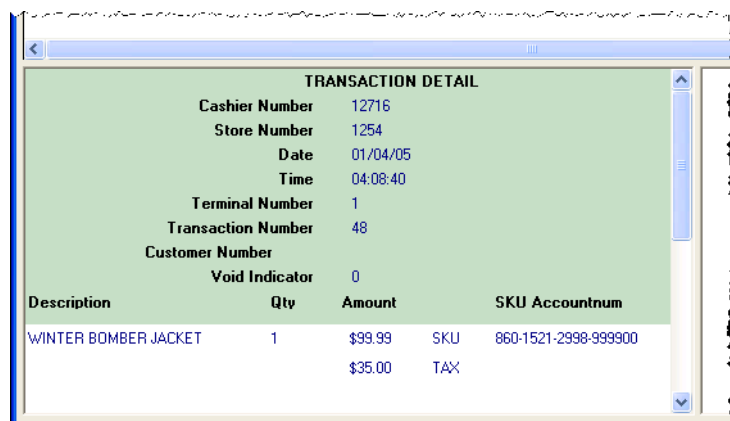


Figure 4-18: Video Queue - Transaction Details

Side Toolbar Functions

There are several functions available on the side toolbar when working in the Video Queue.

Function	Description
Close	Closes the Video Queue window.
Export	Exports the current shortcut list to file formats such as XBR Report Viewer, Excel, or HTML.
Print Preview	Displays how the Video Queue would print.
Options	Contains print options such as margin settings, page layout, and a zoom percentage.
Sort	Sorts the video shortcuts by single or multiple columns in ascending or descending order. The Video Queue can be sorted by a single column in ascending order by clicking once on a column heading. Click the column heading again to sort in descending order.
Filter	Allows a user to focus on specific shortcuts in the queue while hiding others.
* Run Video	Accesses the video for the highlighted shortcut.
* Archive	Saves video shortcuts for a time defined by the user.
* Save	Saves the Video Queue with any shortcuts currently displaying.
* Delete	Removes a selected shortcut from the Video Queue.
* View Detail	Displays Transaction Detail for the selected shortcut.

* These functions are also available in the Options menu.

Temporarily Saving the Video Queue

When you review a video that you would like to access later in the same day, you can save the Video Queue containing all shortcuts. The Video Queue can also be used to save video clips that have not been examined yet. You should delete unnecessary shortcuts before saving the queue.



This is a temporary save; the system automatically clears the queue during processing.

To temporarily save the video queue:

- Click **Save** in the side toolbar, or
- Select Save from the Options menu, or
- Close the Video Queue and click **Yes** when asked if the changes should be saved.

To re-access the video shortcuts, select **Options > Video Queue** from the menu.

Managing the Video Archive

When gathering information for an investigation, you can save all supporting materials for an extended period of time. Instead of re-running queries and linking to the related video, you can use the **Archive** feature.

The **Archive** feature allows you to define how long the system retains shortcuts in the Video Queue.

Archive a Video Shortcut

1. Select **Options → Video Archive** to open the Video Archive for the current user.
2. Select the video shortcut in the Video Queue and click **Archive** on the side toolbar to advance to the Analytics Video - Comments window.

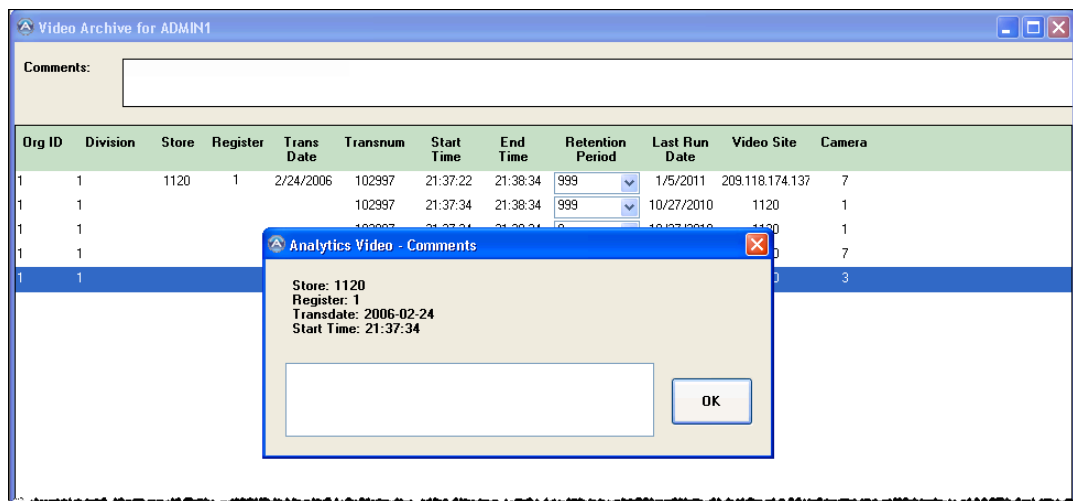


Figure 4-19: Analytics Video - Comments Window

3. Enter a shortcut description to identify the archived shortcut at a later time and click **OK**.
The Comments window will close and the comments entered will be displayed in the Comments block of the Video Archive window.

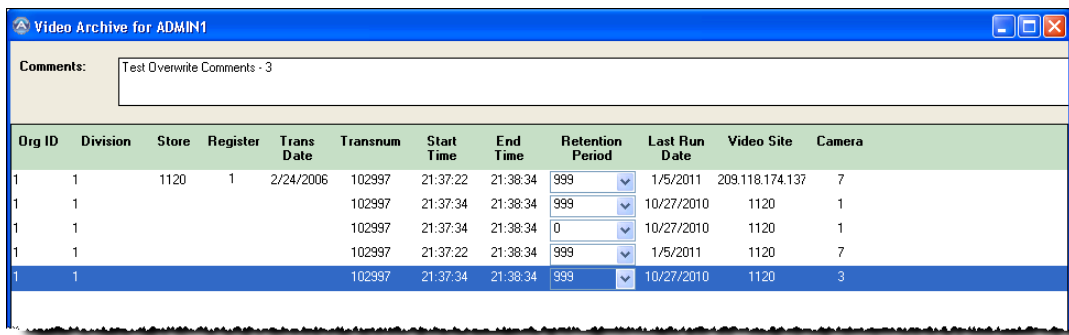


Figure 4-20: Save Archive Area

4. In the Archive area, you can define the **Retention Period** or the length of time in days the system should retain the video shortcut.
5. Click **Save** in the side toolbar to save any changes.
6. Click **Close** to close the Video Archive window.



Saving the actual video is handled by the third party video provider.

Delete a Video Shortcut


1. Select **Options → Video Archive** to open the Video Archive for the current user.
2. Delete the shortcut by:
 - Selecting a shortcut and clicking **Delete** in the side toolbar, or
 - Selecting a shortcut and selecting **Delete Video** from the Options menu.


The shortcut will not be immediately deleted, the Retention Period will be set to "0". The shortcut will be deleted in the next nightly processing.


MY REPORTS WINDOW

The My Reports window displays the Adhoc reports which were designated to be run Offline when running a query from the Run dialog box or that had been scheduled and assigned to the window. The **Source** column displays from where the report was run from either Offline or Scheduled. See the Automating Queries section for more information about scheduling Adhocs and assigning to the My Reports window.


Once a query is run offline the report is displayed on the My Reports window.



If you do not see the report listed click the **Refresh**  button. It may take a few minutes for the report to run offline and display in the window. A process runs on the server all the time that checks to see if queries are waiting to be run offline. The time interval that kicks off this process may be set to 5 or 10 minutes or more depending what was setup during installation of Analytics. Check with your System Administrator if your reports are not displaying in a timely manner.

Click the **My Reports**  icon. Once the results are run and displayed in this window the data is saved within the database so you can review the results anytime without rerunning the query.

View the results of a Query run Offline

1. Double-click on a report or select a report and click the **Review**  button to display the results. The report will not open if No Records or Error is displayed in the Status column. No Records indicates that none of the data met the criteria you set to run the query. Error indicates there was an error when running the query. Either you can try to rerun the query with the same criteria or adjust the criteria and run the query again.



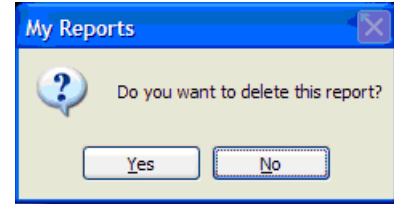
Library	Query	Report Description	Status	Created On	Source
MDH Loss Prevention	FREQ RETURNED SKU	Freq Sku offline	Success	12/27/2007 10:25:00	Offline
	NO SALES SUMMARY-CASHIER	Run Offline	Success	12/27/2007 10:24:00	Offline
	CREDIT CARD - REFLEXION OUT	Cc Refund for register 1	Success	12/27/2007 10:24:00	Offline
	CREDIT CARD - REFLEXION IN	Testing 536	No records	12/27/2007 10:24:00	Offline
	CREDIT CARD - REFLEXION OUT	CC refund	Success	12/27/2007 10:24:00	Offline
	CASH REFUND SUMMARY-STORE	test	No records	10/02/2007 16:20:00	Offline
Product QA	TOP X QUERY	test history	Success	09/13/2007 14:17:00	Scheduled
			Success	09/13/2007 14:15:00	Scheduled
			Success	09/13/2007 14:14:00	Scheduled
MDH Loss Prevention	ASSOCIATE MASTER	Show with ALERT	Success	06/26/2007 14:16:00	Scheduled

Figure 4-21: My Reports Window

2. All the features to manage query results are available in the results window. Close the report when you are done. You will be brought back to the **My Reports** window. The report will be available to you to review until you decide to delete it.

Delete reports from the My Reports Window

1. Click the **Delete**  button to delete a report you do not need to review in the future. This will help to keep your My Reports window organized. Each user has their own My Reports window and is responsible for maintaining the contents.
2. You will be asked if you want to delete the report. Click **Yes** if you do.



According to Payment Card Industry (PCI) requirements; credit card, debit card and bank account information must be secured. Analytics enables customers' to achieve PCI compliance without compromising existing functionality. PCI compliancy is determined by how sensitive data is stored in a database. Raw account numbers are no longer allowed to be stored on the database and therefore, need to be masked, hashed, and/or encrypted.

Analytics provides:

- Masking account numbers
- Hashing account numbers.
- Raw account number lookup (requires a hashed value but not encrypted).
- Encrypting account numbers (optional).
- Decryption (obtain raw account number) by authorized users and only if MICROS-Retail encryption is implemented.
- Ability to change a user password from the front end instead of the in the database.

Hashed and Masked Account Numbers

Masking an account number means that certain digits will be 'blocked out' in order to protect the account number. PCI requirements state that up to the first 6 and last 4 digits of an account # can be displayed. Customers can select to display the maximum or less. For example:

- 123456XXXXXX1234 (1st 6, last 4 digits displayed)
- XXXXXXXXXXXX1234 (only last 4 digits displayed)

The mask value generated in XBR will be the same length as the original account number. For example a 15-digit Amex account number will result in a 15-digit mask value versus a 16-digit Visa account number.

Chapter 4: Managing Query Results

An example of a masked account number in a report appears below:



The screenshot shows a query results window with the title "Query Results for CREDIT CARD SALES (MULTI USE)". The window displays a table with three columns: "Account Number", "# of Uses", and "Net Amount". The account numbers are masked with "X"s. The data is as follows:

Account Number	# of Uses	Net Amount
XXXXXXXXXXXX9906	2	\$37.35
XXXXXXXXXXXX9751	2	\$18.25
XXXXXXXXXXXX9637	2	\$96.30
XXXXXXXXXXXX9509	2	\$175.89
XXXXXXXXXXXX9380	2	\$27.83
XXXXXXXXXXXX9030	2	\$34.91
XXXXXXXXXXXX9013	2	\$41.47
XXXXXXXXXXXX9012	2	\$83.29
XXXXXXXXXXXX8926	2	\$330.39
XXXXXXXXXXXX8773	2	\$45.56
XXXXXXXXXXXX8740	2	\$0.00
XXXXXXXXXXXX8702	2	\$49.12

Figure 4-22: Masked Account Numbers

A hashed value is used, in addition to masking, to generate the unique representation of an account number because the mask is not a unique value. This ensures continued use of the multi-use reports available in Analytics.

An example of a hashed account number appears below. This field is usually hidden for display purposes, but can be displayed and even used to pre-filter query results.



The screenshot shows a query results window with the title "Query Results for CREDIT CARD SALES (MULTI USE)". The window displays a table with two columns: "Account Number" and "Hashed Account Number". The account numbers are masked with "X"s, and the hashed account numbers are long alphanumeric strings. The data is as follows:

Account Number	Hashed Account Number
XXXXXXXXXXXX9906	F9D38C9B4095E4554E83EF5A9891F70DF14263FA
XXXXXXXXXXXX9751	97FF88B5F1CF65513DB6B89B3BE9ACA8C5635EC3
XXXXXXXXXXXX9637	A5E3DCAF5C59D32E472768C7FE78700AEC18E74A5
XXXXXXXXXXXX9509	2C6F070D8086B8A3883E26F3DE0DCCD252ACC88C
XXXXXXXXXXXX9380	D8A132E659FCE9C80C1DB1FFB30F56CD314C7528
XXXXXXXXXXXX9030	305BBDCCB4F70ECF12DC2ABA6B56C48FCF62354F
XXXXXXXXXXXX9013	8622C3A49D13ED579BC67C4A4652A20ED3FFFC5F
XXXXXXXXXXXX9012	A1757D205170310B8618EF8329F8519E73021EA4
XXXXXXXXXXXX8926	FC4A6C8EA222E79D37E7EC541100C066179FB79E
XXXXXXXXXXXX8773	9B1BC74ED2E81D3D3F0D1DDFD3D5F76CE847CDDA
XXXXXXXXXXXX8740	4FDE8C40151C117C173FCAEC062B3120FE2D1CBD
XXXXXXXXXXXX8702	1C4F9077C57867A25C1B7579FF6F1CE7070DEE60

Figure 4-23: Hashed Account Numbers

Account Number Encryption/Decryption

Encryption/Decryption within Analytics is optional. Encryption allows for decryption of account numbers (obtaining the raw account number). Account number decryption will exist only if a customer implements MICROS-Retail's encryption solution.

Only users with authorized access will have the ability to decrypt an account number within the Analytics reports. The decryption function can be accessed when viewing query results that contain the following fields:

- Store
- Transaction #
- Trans Date
- Account number
- Encrypted Account number (hidden field)
- Encryption Key ID (hidden field)

When a user (with applicable permissions) right-clicks a record in the query results, a **Decrypt Account Number** option will display.



Figure 4-24: Decrypt Account Number Option

Upon selecting the **Decrypt Account Number** option, a pop up window will appear with the decrypted value. The decrypt pop up window has a customer-defined time out (for example, 60 seconds). An audit log is maintained in the database detailing which user has accessed the decrypt functionality as well as all related transaction information.

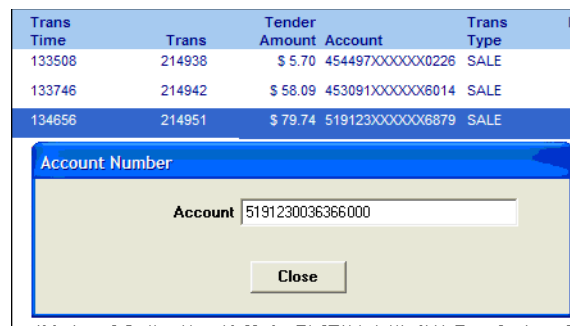


Figure 4-25: Decrypt Account Number

Account Number Lookup

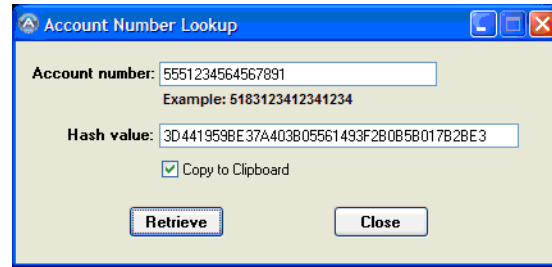


Figure 4-26: Account Number Lookup

The Account Number Lookup window has a customer-defined time-out (for example, 60 seconds) before it automatically closes. The **Copy to Clipboard** option is automatically selected allowing the user to then paste it where needed, for example, in the query prompt criteria when running a query or in a filter window.

C H A P T E R

5

Design Mode for Adhocs

OVERVIEW

Design mode allows users to change the appearance of a query. Although all users can make temporary changes, only users with System Administrator or System Manager security, query owners, and analysts who have built their own queries can make permanent appearance changes to a query.

LEARNING OBJECTIVES

Upon completion of this section, you should be able to:

- Change query titles
- Reorder columns
- Format fields in the Field Properties window
- Hide and Unhide columns


MAKING BASIC CHANGES IN DESIGN MODE

Analytics users can use **Design Mode** to make temporary changes to the appearance of a query. In Design Mode, you can:

- hide/unhide columns
- change column widths
- change the column order in a query
- change the name of column headings
- change a query title

Users often access this feature to tweak a query prior to printing, emailing, or exporting query results.

How To Access/Exit Design Mode

1. After running a query, click the **Design**  button on the **Window** toolbar. You are now in Design Mode, where you are able to modify queries without opening them.



When clicked, the **Design** button is activated or displays lighter than the other buttons and the column headings are outlined by a thin, black rectangle (see Figure 5-1).

2. Select the column you would like to modify. When selected it will be outlined by a white rectangle (see Figure 5-1).
3. Right-click over the column; a shortcut menu appears with a list of options to choose from.

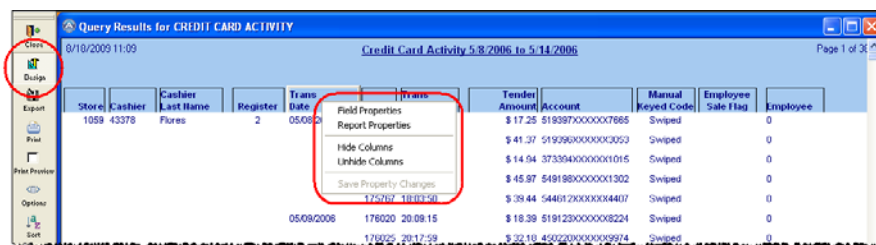


Figure 5-1: Sample Design Mode Screen


4. To exit Design Mode, click the **Design** button again.
5. If asked if you would like to save your changes, click **Yes**.

All users have access to the Design Mode; however, only the owner of a query or System Administrators can make *permanent* changes using this feature. Other users are able to make temporary changes to a query using Design Mode.

CHANGING A REPORT TITLE

In Design Mode you can update the Report Title to better reflect the information displayed on a report once the query has been modified. This feature is used frequently to reflect information that has been filtered.

How To Change A Report Title

1. Click the **Design**  button.
2. Right-click anywhere in the report and select **Report Properties**. The Report Properties dialog box is displayed.

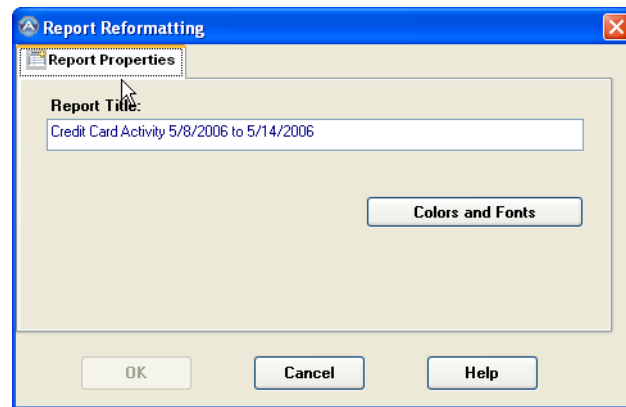


Figure 5-2: Report Properties Dialog Box

3. Change the **Report Title** as needed.
4. Click **OK**.

REARRANGING QUERY COLUMNS

You may want to move columns so you can see certain data adjacent to each other. Use your mouse to drag any column to a new location in a query. The column will move to the area where the mouse is pointing just before you drop it in place.

How To Rearrange Columns



1. Click the **Design** button.
2. Click the column heading you want to move. The column heading will be outlined by a thick, white rectangle.
3. Drag the column and drop it where you would like it to display. As you drag the column you will see a green box which represents the column you are moving.



Figure 5-3: Move Query Column - In Process

Use the mouse to point to the location where the column should appear before dropping it in place.

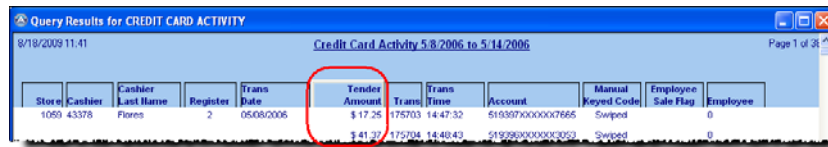



Figure 5-4: Move Query Column - Complete

FORMATTING COLUMNS

In Design Mode, you can make basic formatting changes such as modifying column headings, column widths, and formats. For example, you may want to change “Cashier Last Name” to simply “Last Name” or show fewer decimal places in the “% to Sales” column.

How To Format Columns

1. Click the **Design**  button.
2. Click the column heading you want to format. To format multiple columns hold down the **[Ctrl]** key and click the column headings you wish to format. The column heading will be outlined by a thick, white rectangle.
3. Right-click over the column heading and select **Field Properties** from the menu.

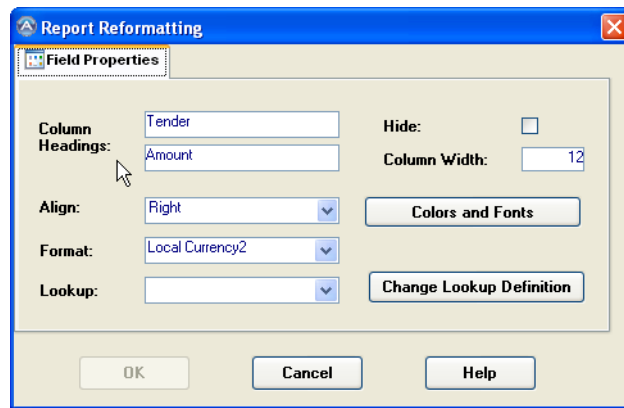


Figure 5-5: Field Properties Dialog Box

4. In the **Field Properties** area, modify column headings; change the alignment, format, and column widths as desired.
Column Headings Type a one or two-line column heading that will display at the top of the selected column.
Align Use the arrow to select the alignment for this column (i.e. Left, Right, or Center).
Format Use the arrow to select the appropriate column format from the list (i.e. 0%, 0.00%, \$#,##0.00).
Column Width Enter the column width for the selected column.
5. Click **OK**.

WORKING WITH LOOKUPS

Information such as tender types, swiped and keyed indicators, and reason codes are saved in the database as cryptic codes. These cryptic codes can be translated into a more meaningful text description by using a Lookup in order to display the text descriptions in queries. For example, it is much easier to identify the text "Swiped" in a query rather than the cryptic code of "01".

The **Field Properties** option in **Design Mode** allows you to assign Lookups to columns or change the Lookup that the column is using. In Design Mode you can access Field Properties by right clicking over a selected column and choosing Field Properties from the shortcut menu.

To assign a Lookup to a column, simply select the desired Lookup from the drop down list as shown below.

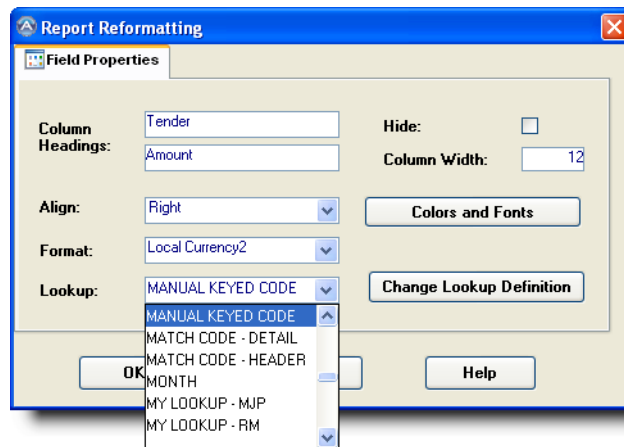


Figure 5-6: Field Properties - Lookup

Design Mode allows **System Administrators** to update the text descriptions that display in your queries for Lookups by using the **Change Lookup Definition** button. For example, instead of seeing that a credit card was 'Keyed', you may prefer to see the text 'Manual'.

If a code displays on a query, it probably has not been added to the appropriate Lookup. The code along with the text description that you would like to see can be updated using this feature.

HIDING AND UNHIDING COLUMNS

In **Design Mode**, you can hide columns you do not want viewed in the query results. If you want to make a hidden column visible, you can unhide the column from the same shortcut menu.

How To Hide Columns



1. Click the **Design** button.
2. Select the column heading you want to hide.



TIP

Multiple columns can be selected by holding down the **[Ctrl]** key while selecting columns.

3. Right-click over the column heading(s) and select **Hide Columns** from the shortcut menu. The remaining columns will shift to fill in the gap.

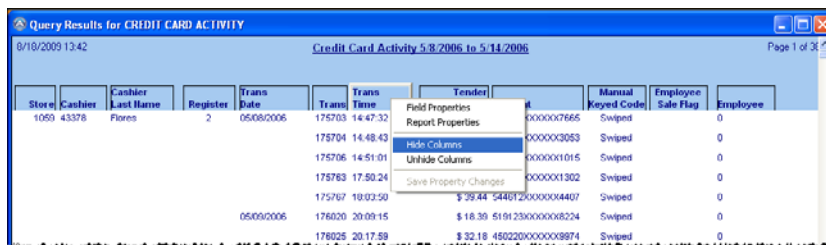



Figure 5-7: Hide Columns

How To Unhide Columns

1. Click the **Design**  button.
2. Right click and select **Unhide Columns** from the shortcut menu.
3. From the **Report Formatting** dialog box uncheck the column(s) you want to unhide.

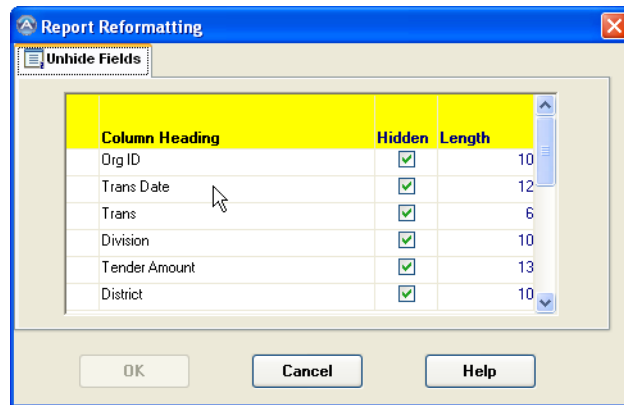


Figure 5-8: Unhide Columns

C H A P T E R

6

Print and Export Query Results

OVERVIEW

Adhoc and Drill Down query results are displayed temporarily if they were selected to run immediately and not Offline. Once the results window is closed, the query needs to be run again in order to retrieve the same results. This can be somewhat tedious if you have accomplished a lot of sorting, filtering and appearance changes. The **print and export** functions allow users to retain a permanent record of query results without having to rerun a query again.

You can save the results if you choose to run the query Offline. If the query was run offline the results are saved in the My Reports Window. See Running Queries for information about running queries offline.

LEARNING OBJECTIVES

Upon completion of this section, you should be able to:

- Print a query
- Save print options
- Export a query
- E-mail a query on the fly

PRINTING

Before printing query results, you should consider the print options that are available via the **Options** button in the Windows toolbar. It is also recommended that you select the **Print Preview** mode to gain a clear visual as to how the results will be displayed on a sheet of paper.



The **Options** button allows you access to preferences such as:

- Portrait or Landscape
- Margin Settings
- Type a custom Report Title
- Increase or decrease the size of the query for display and printing
- Increase or decrease the size of a query in print preview

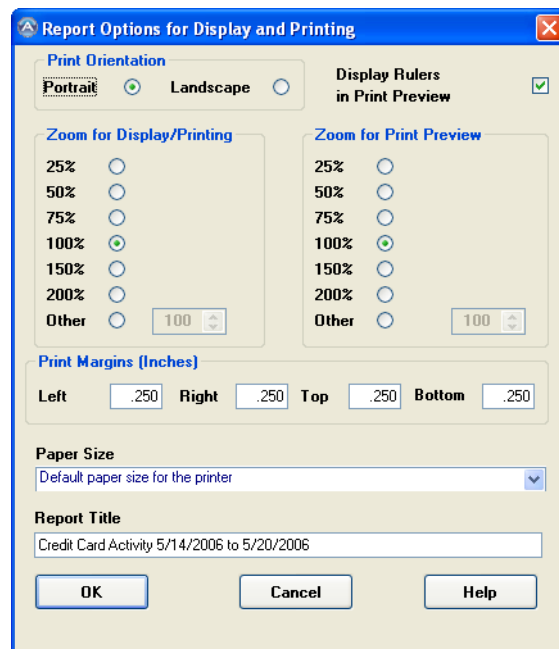


Figure 6-1: Report Options

- Remember to change the Report Title before printing if you have re-sorted or filtered your query results. These features can change the focus of the query and it is helpful to print a Query Title that reflects the actual content.
- To save any printing options you have modified (such as orientation or zoom), select Options, Save Options from the main System menu. This saves your customized print settings for your unique User ID only.
- Changing report titles in the Options section is a temporary change. When you re-run the query, its original title reappears. Therefore saving options does not include saving the new report title.



The **Print Preview** button displays the current query results in **Print Preview** mode, which displays how a query will appear as a printed copy. Click the button again to exit **Print Preview** mode.

This option is necessary in order to select the current page or a range of pages option in the Print window.

Unless you are in **Print Preview** mode you cannot select specific pages to print because page lengths are calculated differently for the printer than for the on-screen display. Print Preview will resize the document to printed pages.



The **Print** button will display the **Print** dialog box.

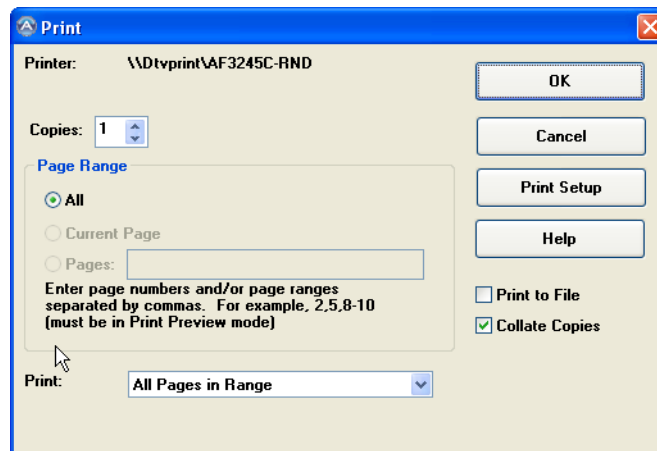


Figure 6-2: Print Dialog Box

Print Option	Description
Copies	Enter the number of copies to print.
Page Range	Print all pages, only the current page, or selected pages. Users must be in Print Preview mode to use this option
Print	Print all pages in the range or only the odd or even numbered pages.
Print to File	Send output to a printer or a file. If Print to File is selected, you will be prompted for a filename and will need to specify the directory where you want the file saved.
Collate Copies	Collate pages if you are printing multiple copies.

EXPORTING

Exporting allows users to save query results permanently until the file is manually deleted. This feature is a resourceful tool because it allows users to permanently retain Adhoc and Drill Down results outside the Analytics application without having to re-run a query.



The **Export** button exports a query to various file formats. Exporting query results allows you to view information without having to log in to Datavantage Analytics. There are TWO ways to export, either Standard Export or Custom Export:

- Choose Standard Export to save a query in one of the following formats
 - Analytics Report (PSR)
 - Adobe Acrobat (PDF)
 - Comma Separated Values
 - dBase
 - Lotus 1-2-3
 - Microsoft Excel
 - Tab-separated columns
 - Text with HTML formatting
- Choose Custom Export when you need to select field delimiters, end of line markers, and quotes enclosing fields. This is useful if you are creating a feed to another system that has specific formatting requirements.

Helpful Hints:

- Information that is exported is saved independently of Analytics.
- The ability to link to other queries (or to drill downs) is not available for exported queries.
- Exporting is a time saver, especially for your remote dial-in users. Users can send other users an export of the query results rather than re-running the query.
- It is recommended that you make a note to help remember the drive and folder the exported query was saved to.
- Query Filter Display options will show up in the following formats: Analytics (PSR), PDF and HTML.

How to Export a Query

1. When viewing query results, click the **Export**  button. The Export Query Results dialog box is displayed.

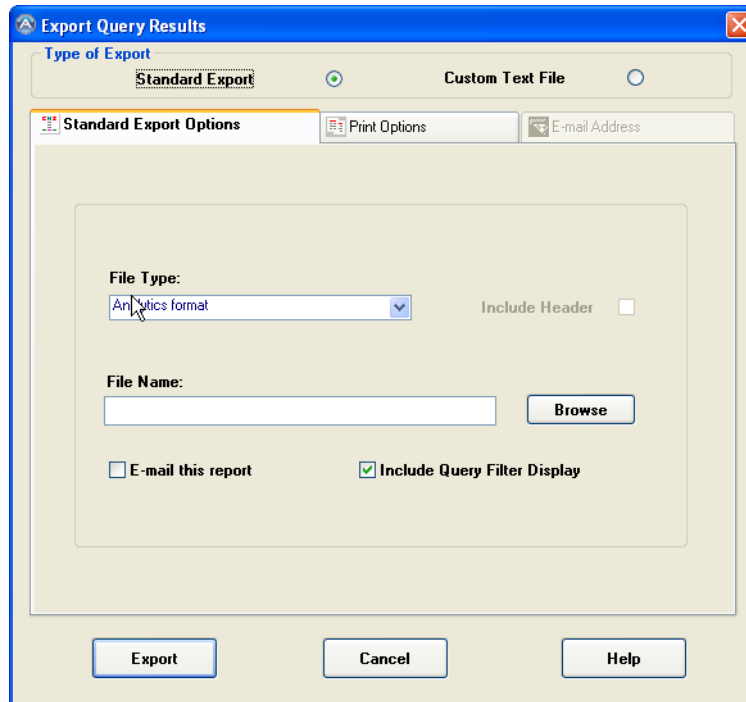


Figure 6-3: Export Query Results - Standard

2. Choose **Standard Export**.
3. Select a desired **File Type** from the drop down list.
4. **[OPTIONAL]** For some file types, check the **Include Header** option if you would like to include column headings. This is highly recommended for spreadsheet file types like Excel and Lotus.



If the **Include Header** option is dimmed, the column Headings will automatically be exported.

5. Click the **Browse** button to select a location to save the exported report and type a name for the file.
6. **[OPTIONAL]** Select **E-Mail this report** to be able to add email addresses on the Email Address tab. See [“E-Mail Queries On-the-Fly” on page 85](#) for details.

7. **[OPTIONAL]** Select **Include Query Filter Display** to have the selected criteria and parameters and any filters that were applied to the query print out on the exported report.



The **Query Filter Display** option is only available if the file type is PSR, PDF, or HTML.

8. **[OPTIONAL]** Click the Print Options tab and then indicate the Zoom Percentage and Page Orientation of your exported query.
9. Click the **Export** button.

Exporting Various Query Features

A check (✓) in the chart below indicates the file formats that will retain various Query features.

	Report Calc	Subtotals & Totals	Graphs	Lookups	Hidden Columns	Query Filters Applied
Analytics (PSR)	✓	✓	✓	✓		✓
Adobe Acrobat (PDF)	✓	✓	✓	✓		✓
HTML	✓	✓		✓	✓	✓
Custom Text	✓	✓		✓	✓	
Workbook/ Spreadsheet					✓	

- Report calculation fields, such as a **Trans Day** (i.e. Monday) or **Percent Contribution** will **NOT** export to all file formats. If some report columns are not showing up in the export file, they are probably report calculations, which do not export in all file types.
- Report calculations will appear in exported PSR, Adobe Acrobat, HTML, or Custom Text file types.
- If possible, change the fields in the query from report calculations to computations using database fields so they will be exported.
- If you really need a report calculation in a format that will not export it, you can use a Custom Text File as an intermediate file. For example, if the field is required in a spreadsheet, you can export to a custom text file and then import that file into your spreadsheet software.
- When exporting a graph to HTML, comma separated values, or a spreadsheet format the data behind the graph is exported.

EXPORTING TO A CUSTOM FORMAT

This option lets you create a text file with your choice of options for field delimiters, end of line markers, and enclosing fields. This is useful if you are creating a feed to another system that has specific formatting requirements.

Export to a Custom Format

1. Click the **Export**  button. The Export Query Results dialog box is displayed.

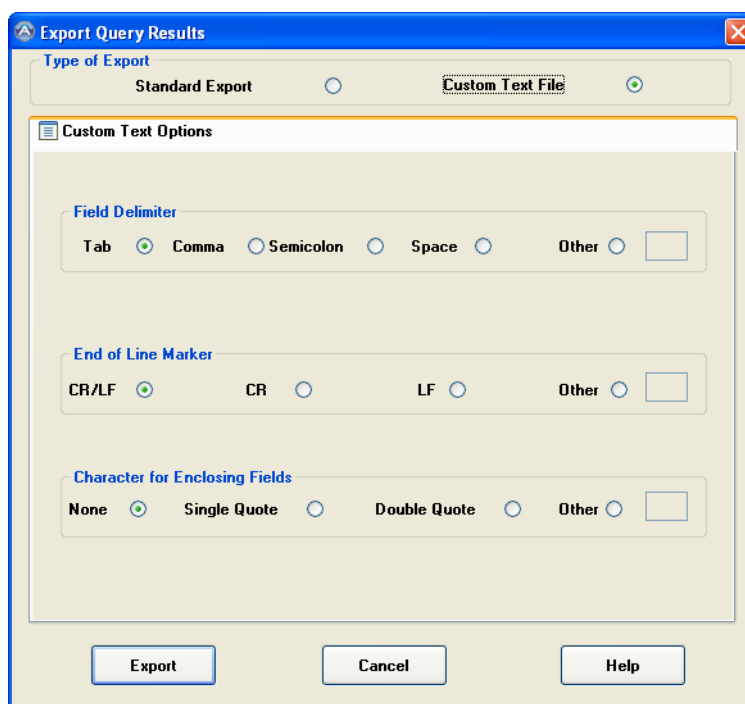


Figure 6-4: Export Query Results - Custom Text

2. Select the **Custom Text File** radio button.
3. Select a **Field Delimiter** character.
4. Select the **End of Line Marker** character.
5. Select the characters for enclosing fields, if necessary.

The default characters listed in the dialog box (see Figure 6-4) are those most commonly used in text files.

E-MAIL QUERIES ON-THE-FLY

Use the Export feature to e-mail queries on-the-fly to:

- Analytics users
- A user-defined mailing list containing Analytics users
- Any email address entered during the export process

Emailing exported queries allows users to share pertinent information right away with others in the organization whether they are Analytics users or not. There is no need to exit Analytics in order to attach an exported query to an e-mail message; it is not necessary to launch your email program for this process either. For example, users can use Analytics to e-mail a Sales query to location managers on the fly or instantly send a regional manager information about an employee's suspicious activity.

How To E-Mail Exported Queries On-The-Fly

1. When viewing query results, click the **Export** button and select a **File Type**.

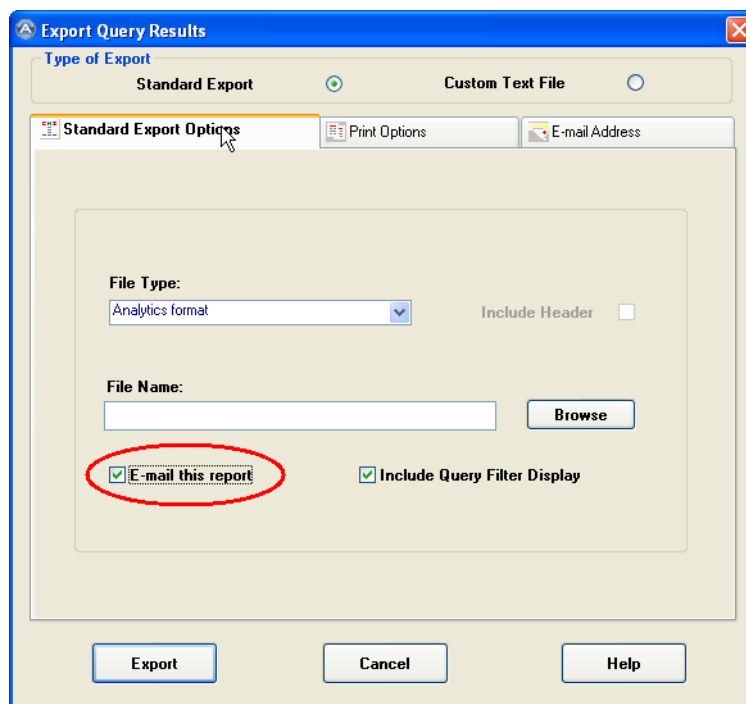


Figure 6-5: Export Query Results - E-Mail This Report

2. Check the **E-mail this report** option in the Export dialog box.
3. Select the **E-mail Address** tab.

Chapter 6: Print and Export Query Results

4. Indicate the recipients by dragging and dropping User names or Group names from the **Available Recipient** box on the left to the **Selected Recipients** area on the right.



*If you would like to e-mail the query to someone who is not on the list, type the e-mail address in the **Address** area then click the **Add to List** button.*

5. Type a **Subject** for your message.
6. Click the **Email Note** button to add notes that will appear in the body of the e-mail message.

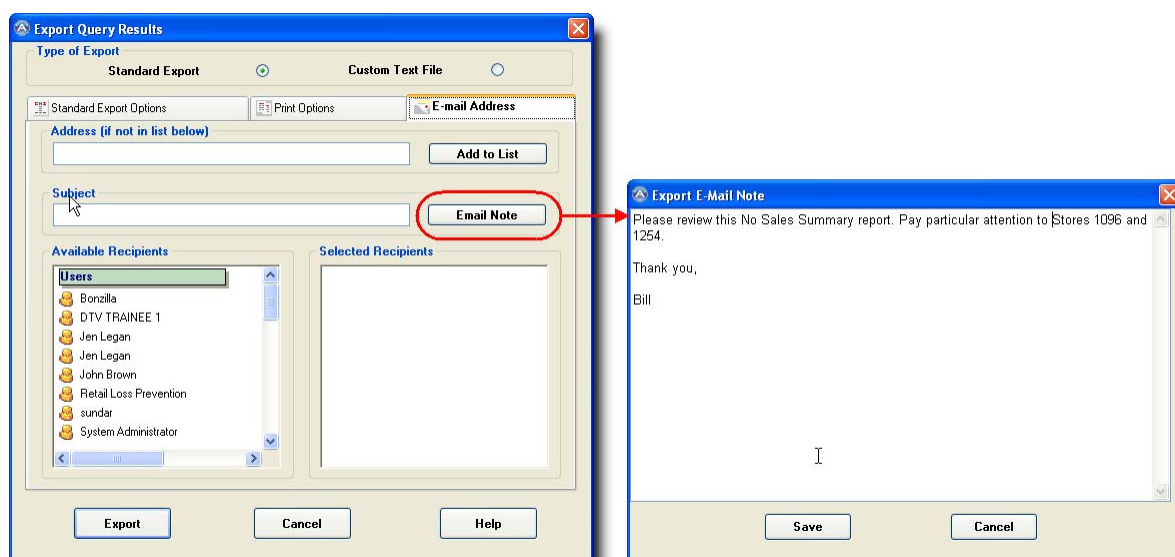


Figure 6-6: Email Note

7. Click the **Save** button to return to the Export Query Results box.
8. Click the **Export** button. This will export the query results and send the e-mail message. If you would like to e-mail the query to someone who is not on the list, type the e-mail address in the Address area then click the **Add to List** button.

What will the recipient of the email see and receive when you email an exported report?

The recipient of the email will see in their inbox the message with the subject of what the sender typed in the Subject text box in the Export Query Results dialog box. The email note you typed will appear in the recipients email message along with the attached exported report.

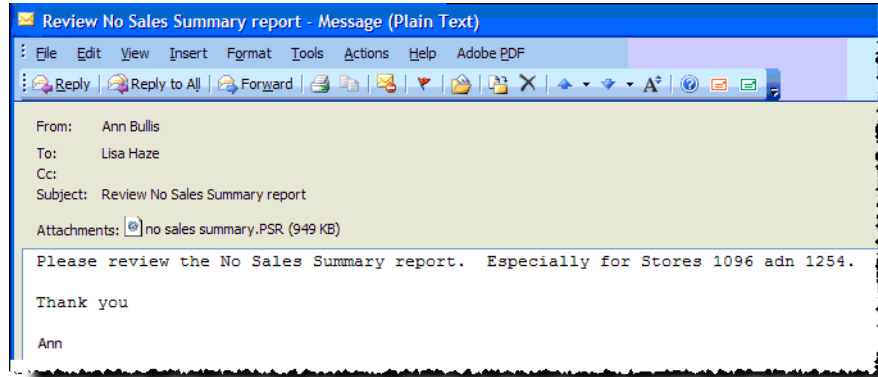


Figure 6-7: Export Email

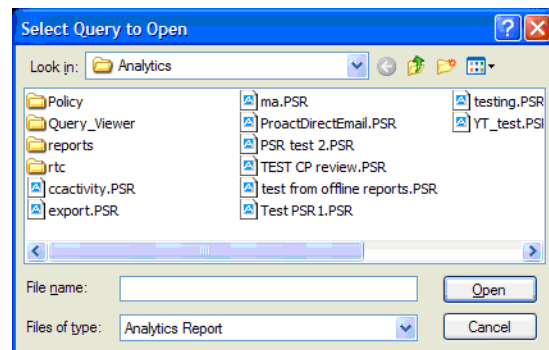
OPENING AN EXPORTED PSR (ANALYTICS FORMAT) REPORT

Users can view query results that have been exported in the Analytics Report format (PSR) either via the application itself or via the standalone Analytics Query Viewer. The Query Viewer does not require a user to be connected to the Analytics database to view exported PSR reports. This allows users to e-mail an Analytics report to remote users anywhere in the field. The PSR reports maintain the same look and feel as they appear in Analytics. The results will be displayed in a Query Results window. Users have the ability to sort, filter, export and print. However, linking is not available since the query is a snapshot and not connected to the database.

Opening a PSR file using Analytics

How To Open a PSR file in Analytics

1. Select **File -> Open Exported Query** from the Analytics System menu.
2. Select the location and the exported Analytics Report (.PSR) from the **Select Query to Open** dialog box.
3. Click the **Open** button.



Opening a PSR file using the Query Viewer

In order to open a Analytics report (.PSR file) for the first time, it needs to be associated with the Query Viewer. This allows the system to identify with what application it opens a .PSR file going forward.

How to Associate a .PSR File with Query Viewer

1. Launch Window Explorer.
2. From the window menu, select **Tools -> Folder Options -> File Types -> New**.
3. In the **File Extension** field, type PSR.
4. Click the **Advanced** button.
5. From the **Associated File Type** drop down, select PSR File.
6. Click **OK** and close out of the windows.

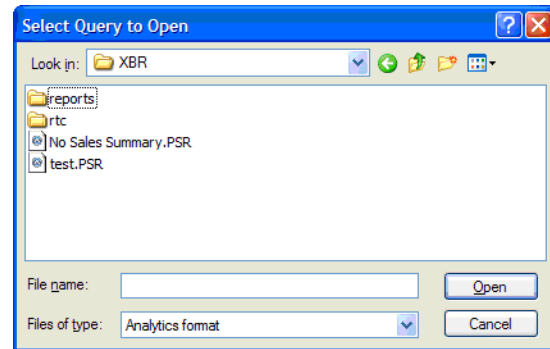
Alternately, you can associate a .PSR file with the Query Viewer by following the steps below:

1. Launch Window Explorer to locate the Analytics_6.5\Query_Viewer folder
2. Double-click TEST.PSR and a dialog box labeled **Open With** appears.
3. Click the **Other** button and select Sybase Inc Product File or Analytics.exe.
4. Click the **Open** button and make sure the option **Always use this program to open this file** is checked.
5. Click the **OK** button.

Now, when you try to open an exported or e-mailed PSR file, it will automatically open in the Query Viewer.

How to Open a PSR File Using Query Viewer

1. Double-click the `DTVViewer.exe` file, which is located in the `Analytics_6.5\Query_Viewer` folder. The **Query Viewer** will launch with a blank screen.
2. Click the **Open** button to locate an exported PSR file. The **Select Query to Open** window is displayed.
3. Use the **Look In** drop down field to find the exported Analytics format (PSR) file you would like to open.
4. Select the file name and click **Open**. The query results will display.
5. The same options and functionality available in Analytics are available via the Query Viewer.
 - Export
 - Print
 - Print Preview
 - Options
 - Sort
 - Filter
6. Click the **Close** button to exit the query.



CHAPTER

7

Drill Down Queries

OVERVIEW

Drill Downs are summary level, statistical queries that are valuable for management reporting. They allow you to drill down through a store's operational hierarchy or any other grouping as defined within an organization, such as a Loss Prevention regional hierarchy. Drill Downs are intended to summarize data and are designed to link to Adhoc queries to review the details behind the summarized values. A Drill Down Path displays at the top of each query and shows you each level within the hierarchy that you have advanced through. This path remains visible while viewing the query within the application, a printed copy or an exported file.

LEARNING OBJECTIVES

Upon completion of this section, you should be able to:

- Locate and run Drill Downs
- Navigate from level to level within the hierarchy
- Link to Adhocs

PROCEDURES

HOW TO LOCATE AND RUN A DRILL DOWN QUERY

Drill Down queries are located on the **Drill Down** tab in the Queries window. Expand the classifications folder and select a query name to locate a Drill Down query. Click the **Run** button or double click the Drill Down query name to run the Drill Down.



Once the query has run, the **Next Level** button can be used to advance to the next level.



The **Previous Level** button can be used to return to the previous level.


As you progress through the Drill Down levels, the Drill Down path is displayed (circled below).

Drill Down queries are not saved, unless the query results are printed or exported to a file, such as Analytics, Adobe, HTML, or Microsoft Excel file. When a Drill Down query is exported, only the level that is displayed, and not the entire hierarchy, will be exported. See [Chapter 6, "Print and Export Query Results" on page 77](#) for more information on exporting information.

Division	Region	District	Store	Sales Count	Sales Amount	CC Trans Count	CC Trans Amount	CC Trans Avg Amount	CC Trans Pct Trans	CC Trans Pct Sales	CC Ref Exch MO Co
Division: 2-Retail				191,113	\$ 6,018,726.64	30,180	\$ 1,195,792.68	\$ 39.62	15.79%	19.87%	21
Region: South				3,137	\$ 119,197.48	410	\$ 20,841.77	\$ 50.83	13.07%	17.49%	1
District: Powell				3,137	\$ 119,197.48	410	\$ 20,841.77	\$ 50.83	13.07%	17.49%	1
Store: 1556				3,137	\$ 119,197.48	410	\$ 20,841.77	\$ 50.83	13.07%	17.49%	1
Cashier Last Name	Cashier First Name	Sales Count	Sales Amount	CC Trans Count	CC Trans Amount	CC Trans Avg Amount	CC Trans Pct Trans	CC Trans Pct Sales	CC Ref Exch MO Co		
58958 Fiske	Toni	288	\$ 10,527.97	38	\$ 1,683.95	\$ 44.31	13.19%	16.00%	1		
59263 Fisher	Levar	43	\$ 1,636.16	9	\$ 306.49	\$ 34.05	20.93%	18.73%	0		
59799 Spink	Valdo	411	\$ 15,099.09	59	\$ 3,170.53	\$ 53.74	14.36%	21.00%	0		
0 Wilkins	Marc	0	\$ 0.00	0	\$ 0.00	\$ 0.00	0.00%	0.00%	0		
58965 Reagan	Ronald	177	\$ 7,407.61	27	\$ 1,430.54	\$ 52.98	15.25%	19.31%	0		
58972 Raines Jr.	Tim	203	\$ 7,069.59	22	\$ 1,153.31	\$ 52.42	10.84%	16.31%	0		
58993 Beiste	Matt	232	\$ 8,425.22	36	\$ 1,513.64	\$ 42.05	15.52%	17.97%	0		
61471 Naras	Bruno	359	\$ 14,328.50	56	\$ 2,978.96	\$ 53.20	15.60%	20.79%	0		
61649 Beatty	Warren	4	\$ 80.23	1	\$ 28.46	\$ 28.46	25.00%	35.47%	0		
100 Sprewell	Latrell	0	\$ 0.00	0	\$ 0.00	\$ 0.00	0.00%	0.00%	0		
58971 Gullen	Jose	499	\$ 19,260.70	62	\$ 3,503.10	\$ 56.50	12.42%	18.19%	0		
58995 Hentgen	Pat	145	\$ 5,228.02	21	\$ 1,124.97	\$ 53.57	14.48%	21.52%	0		
60313 Sudo	Alton	776	\$ 30,134.39	79	\$ 3,947.82	\$ 49.97	10.18%	13.10%	0		
Report Totals		3,137	\$ 119,197.48	410	\$ 28,841.77	\$ 50.83	13.07%	17.49%	1		


Figure 7-1: Drill Down - Store Level

How to Run a Drill Down Query

1. Select the **Drill Down** tab.
2. Expand a Classification.
3. Double click a **Drill Down** Query to run it.
4. Select a time frame in the date selection area and criteria, click the **Run** button.
5. When the Query results display, select a row and use the **Next Level**  button to advance to the next level.



Double click a row to advance to the next level.

To return to a previous level, click the **Previous Level**  button.



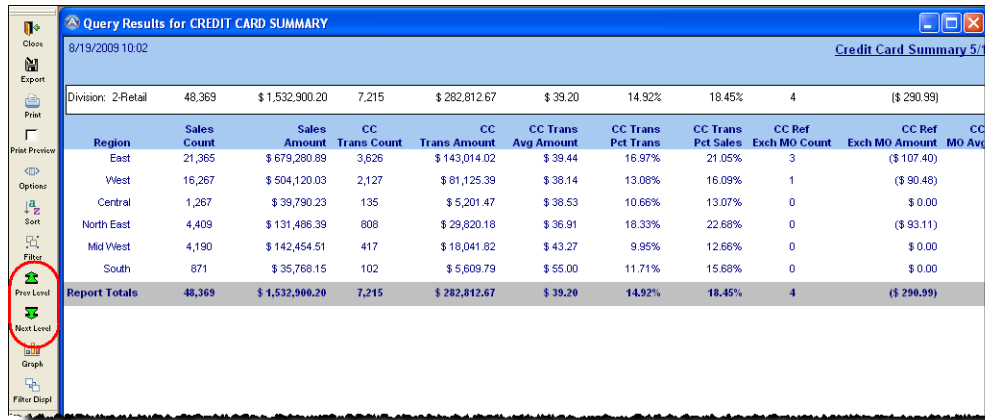
Drills Down query results can be filtered, sorted, freeze columns etc. See [Chapter 4, "Managing Query Results" on page 37](#) for more information.

6. At the lowest level, a **Next Level** option will no longer appear. Click the **Link** button to link to an Adhoc query for detail information.

To return to the Drill Down results close the Adhoc window.

NAVIGATING THROUGH A DRILL DOWN QUERY

From Division to Region:



Query Results for CREDIT CARD SUMMARY

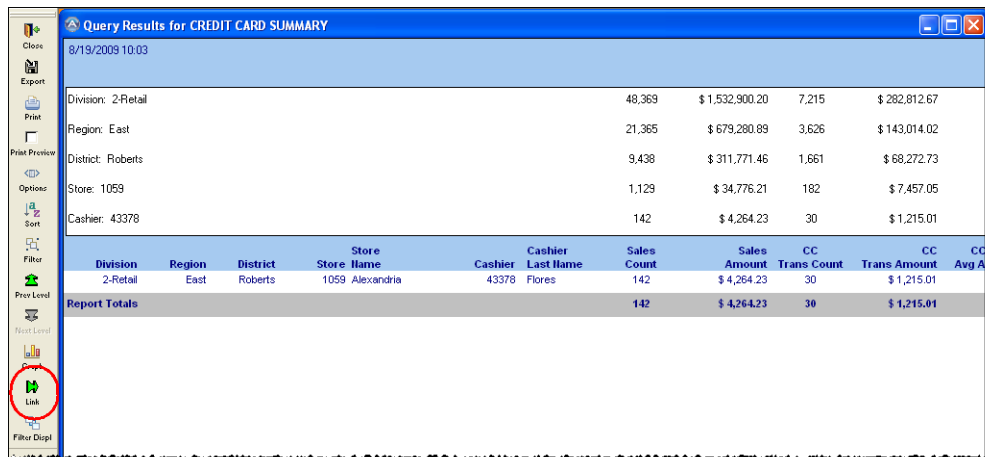
8/19/2009 10:02

Credit Card Summary 5/1

Region	Sales Count	Sales Amount	CC Trans Count	CC Trans Amount	CC Trans Avg Amount	CC Trans Pct Trans	CC Trans Pct Sales	CC Ref Exch MO Count	CC Ref Exch MO Amount	CC Ref MO Avg
Division: 2-Retail	48,369	\$ 1,532,900.20	7,215	\$ 282,812.67	\$ 39.20	14.92%	18.45%	4	(\$ 290.99)	
East	21,365	\$ 679,280.89	3,626	\$ 143,014.02	\$ 39.44	16.97%	21.05%	3	(\$ 107.40)	
West	16,267	\$ 504,120.03	2,127	\$ 81,125.39	\$ 38.14	13.08%	16.09%	1	(\$ 90.48)	
Central	1,267	\$ 39,790.23	135	\$ 5,201.47	\$ 38.53	10.66%	13.07%	0	\$ 0.00	
North East	4,409	\$ 131,486.39	808	\$ 29,820.18	\$ 36.91	18.33%	22.68%	0	(\$ 93.11)	
Mid West	4,190	\$ 142,454.51	417	\$ 18,041.82	\$ 43.27	9.95%	12.66%	0	\$ 0.00	
South	871	\$ 35,768.15	102	\$ 5,609.79	\$ 55.00	11.71%	15.68%	0	\$ 0.00	
Report Totals	48,369	\$ 1,532,900.20	7,215	\$ 282,812.67	\$ 39.20	14.92%	18.45%	4	(\$ 290.99)	

Figure 7-2: Drill Down from Division to Region

Lowest Level in the Hierarchy - Cashier in this example:



Query Results for CREDIT CARD SUMMARY

8/19/2009 10:03

Division: 2-Retail	48,369	\$ 1,532,900.20	7,215	\$ 282,812.67
Region: East	21,365	\$ 679,280.89	3,626	\$ 143,014.02
District: Roberts	9,438	\$ 311,771.46	1,661	\$ 68,272.73
Store: 1059	1,129	\$ 34,776.21	182	\$ 7,457.05
Cashier: 43378	142	\$ 4,264.23	30	\$ 1,215.01

Division	Region	District	Store Name	Cashier Last Name	Sales Count	Sales Amount	CC Trans Count	CC Trans Amount	CC Avg A
2-Retail	East	Roberts	1059 Alexandria	43378 Flores	142	\$ 4,264.23	30	\$ 1,215.01	
Report Totals					142	\$ 4,264.23	30	\$ 1,215.01	

Figure 7-3: Drill Down - Cashier Level

Linked to an Adhoc for more detail to the above summary:

Query Results for CREDIT CARD ACTIVITY

8/19/2009 09:58 Credit Card Activity 5/14/2006 to 5/20/2006 Page 1 of 1

Store	Cashier	Cashier Last Name	Register	Trans Date	Trans Time	Tender Amount	Tender Account	Manual Keyed Code	Employee Sale Flag	Employee
1059	43378	Flores	2	05/15/2006	177585 13:36:52	\$ 12.08	400941XXXXXX1015	Swiped		0
					177586 13:42:12	\$ 23.58	519123XXXXXX7110	Swiped		0
					177682 18:48:41	\$ 46.00	440396XXXXXX5077	Swiped		0
					177683 18:54:18	\$ 44.82	450060XXXXXX5286	Swiped		0
					177716 21:04:37	\$ 37.25	455121XXXXXX2831	Swiped		0
			1	05/16/2006	177754 13:26:39	\$ 163.64	452085XXXXXX0278	Swiped	Y	22960
					177768 14:59:14	\$ 13.80	455121XXXXXX2093	Swiped		0

Figure 7-4: Drill Down - Linked Adhoc Query

CHAPTER

8

Graphing Queries

OVERVIEW

Graphs provide a visual and colorful approach for reviewing information at-a-glance. Graphs can help you to spot trends and exceptions. Graphs are dynamic, like queries, which allow you to analyze the most recent activity and link to additional details.

LEARNING OBJECTIVES

Upon completion of this section, you should be able to:

- Run a graphed query
- Edit the Graph Title
- Modify the Graph Type
- Toggle between graphs and reports
- Create a temporary graph

PROCEDURES

HOW TO RUN A GRAPHED QUERY

Graphs are created from Adhoc and Drill Down queries. You can easily switch between a graph and a query. You can also print and export graphs like you would for other query types. Refer to [Chapter 6, "Print and Export Query Results" on page 77](#) for more information.

Existing graphs have already been created from related Adhocs and Drill Downs. Analyst can create new graphs, which are temporary. Only System Administrators and the owner of a query can create and save new graphs permanently.

How to Run an Existing Graph

1. Open the Queries window and expand an Adhoc classification. If a "+" sign exists next to query name, then a graph exists for that query.



The graph icons that appear next to graph names indicate the type of graph.

2. Expand a query name to view graph selections and double click a graph.
3. In the **Run** window, indicate preferences (date range, parameters and criteria).
4. Click the **Run** button. The graph will display.



*You can quickly switch to the query from a graph by clicking the **Report** button.*

*You can quickly switch to a graph from a query by clicking the **Graph** button. If there is more than one graph available, select a graph from the **Graph Selection** dialog box.*

Anatomy of a Graph

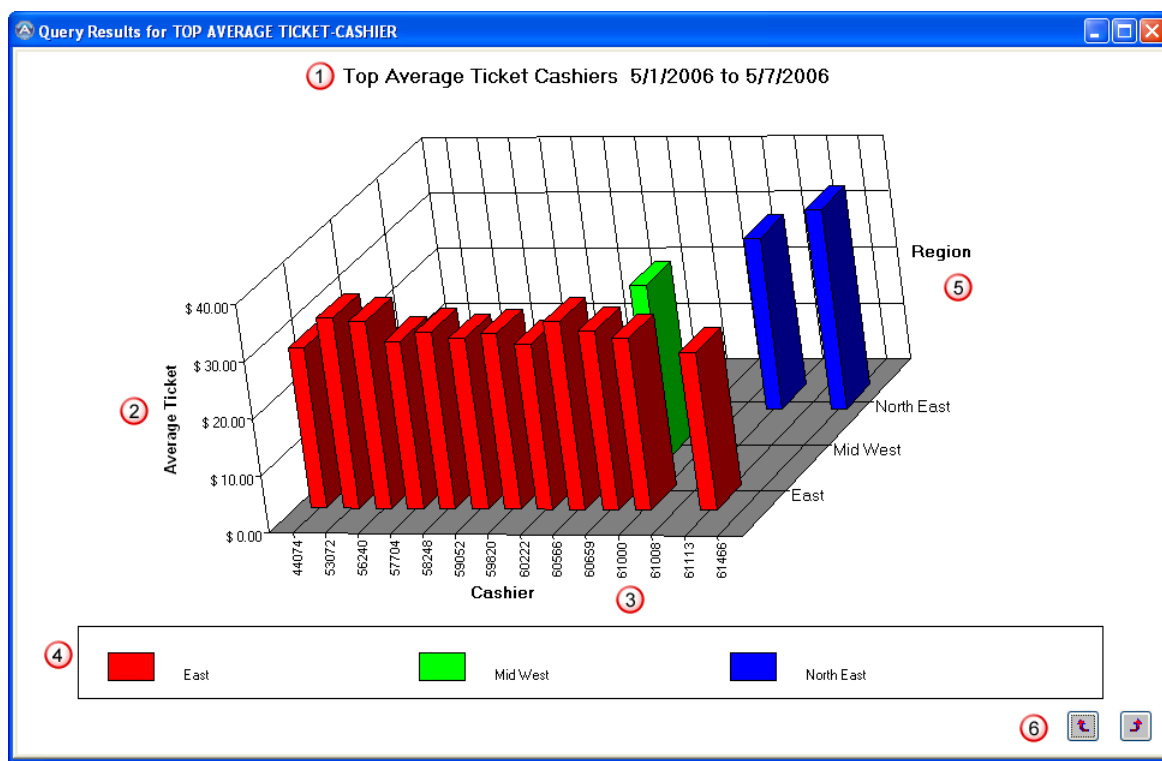


Figure 8-1: Sample 3-D Graph

Below is a list of common terms that are used when working with Analytics Graphs:

①	Title	The name of the graph which appears at the top.
②	Value Label	The data that appears on the left side (vertical) of the chart.
③	Category Label	The data that appears at the bottom (horizontal) of the chart.
④	Series Label	The data that appears on the right side (depth) of the chart.
⑤	Legend	The key to identify the data points (columns, bars, pie pieces, etc) in a chart.
⑥	Rotate Buttons	The buttons that appear at the bottom right of a 3-D graph that allows users to rotate the graph.

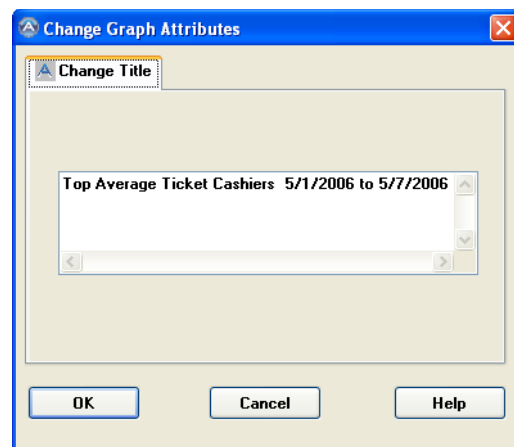
MODIFYING A GRAPH

Graphs can be modified to reflect filtered data, title changes, and different graph types. System Administrators and query owners can modify graph elements and save changes. Analysts can modify graph titles and graph types; however these changes are temporary unless they are the owner of the query. Although Analyst changes are temporary, modifying various elements of the graph prior to printing or exporting can be helpful so the data is reflected accurately.

Changing a Graph Title

How to Change the Graph Title

1. Run the graph from the Queries list.
2. Right click on the graph.
3. Select **Modify Graph Title** from the shortcut menu. The **Change Graph Title** dialog box is displayed (see right).
4. Change the title as desired.
5. Click **OK**.



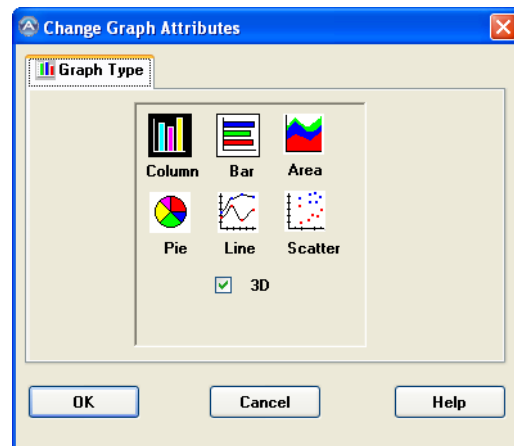
Changing a Graph Type

Changing the graph type allows you to change the visual representation of data from one graph format to another. For example, changing a column graph type to a pie graph type. Although you can print and export graphs in the type that is currently displayed, the graph will return to its default graph type the next time it is run. The list below describes the purpose of each chart type. The type you use depends on the data you are graphing as well as the preferences of those creating a graph or reviewing the graph.

Use this Type	To Create a Graph that . . .
Column	Displays vertical bars, which compare values across a category
Bar	Displays horizontal bars, which compare values across a category
Area	Displays trends across a category
Pie	Pieces of a Whole. You may want to see how large Region 4's portion (amount or counts) compares to the rest of the Regions
Line	Displays trends across a category
Scatter	Compare pairs of values

How to Change the Graph Type

1. Run the graph from the Queries list.
2. Right click on the graph.
3. Select **Modify Graph Type** from the shortcut menu. The Change Graph Type dialog box is displayed (see right).
4. Select a graph type.
5. Click **OK**.



Changing the Graph Label Orientation

When selecting a graph category or label to display across the horizontal or vertical axis, the values or text may not fit on the axis if there are many values to display. The orientation can be changed to vertical, horizontal or 45-degree angle to display the information more clearly.

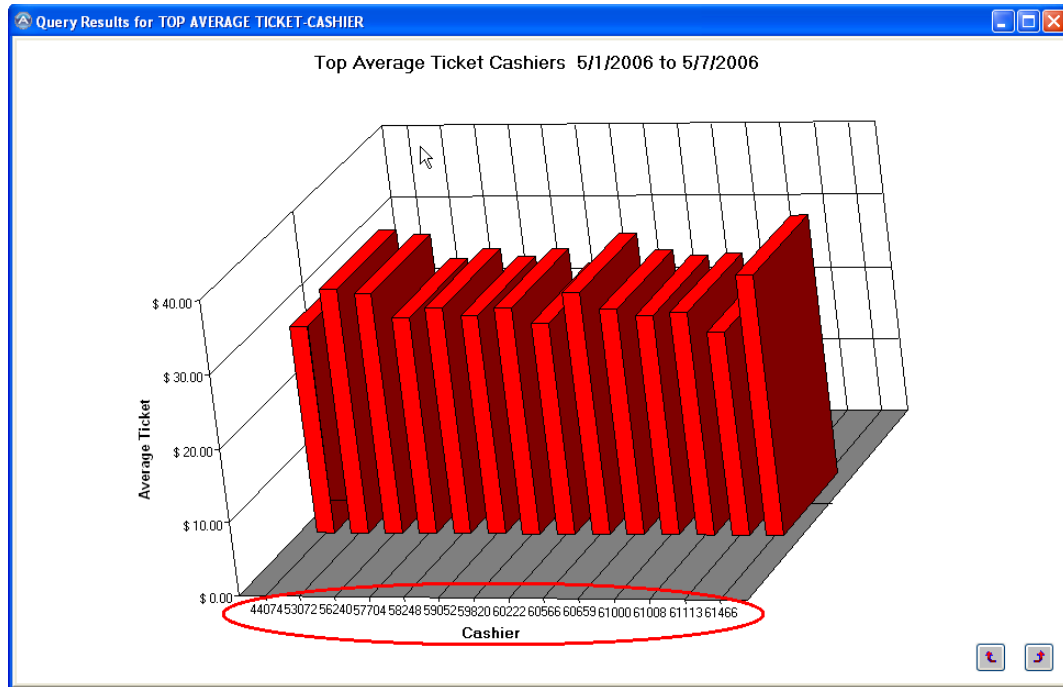


Figure 8-2: Horizontal Axis Text- Horizontal

How to Change the Axis Orientation

1. Run the graph from the Queries list.
2. Right click on the graph. The shortcut menu appears.
3. Select **Full Graph Maintenance** from the shortcut menu.



Only System Administrators, System Managers, or query owners will have the **Full Graph Maintenance** option.

Modify Graph Type
Modify Graph Title
Full Graph Maintenance
Select/Create Graph

4. Click the **Advanced** button in the upper right section of the Graph Maintenance window.
5. Click either the **Category Axis** tab or the **Vertical Axis** tab whichever label orientation needs to be changed.

6. In the **Label** section, click the **Orientation** drop down field, and select Horizontal, Vertical or 45 Degrees.

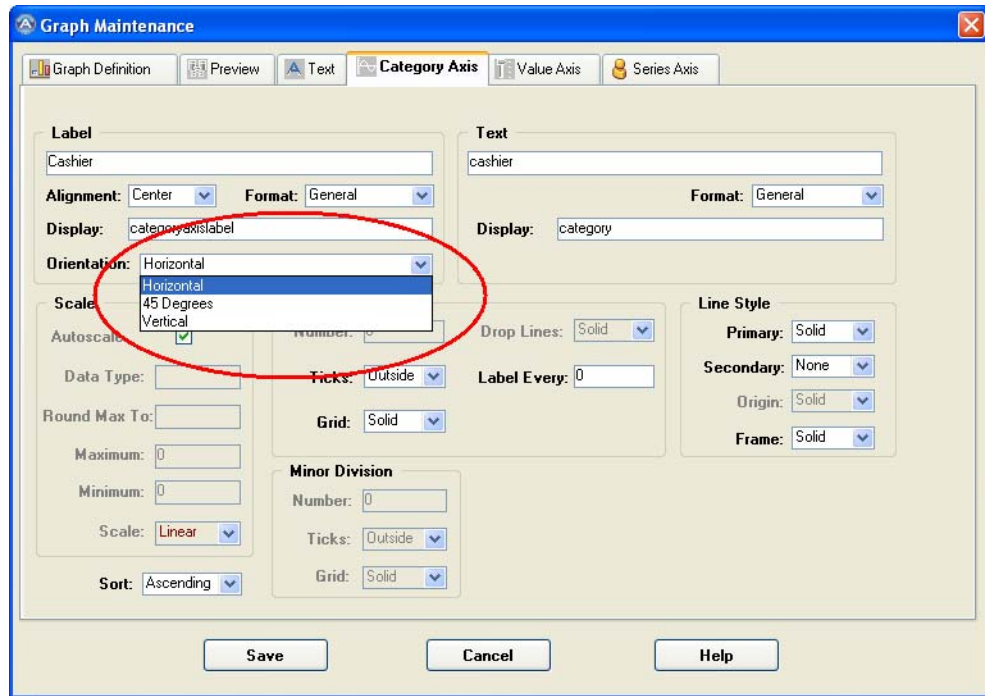


Figure 8-3: Category (Horizontal) Axis Orientation

7. Click **Save** and the graph will display with the changes.

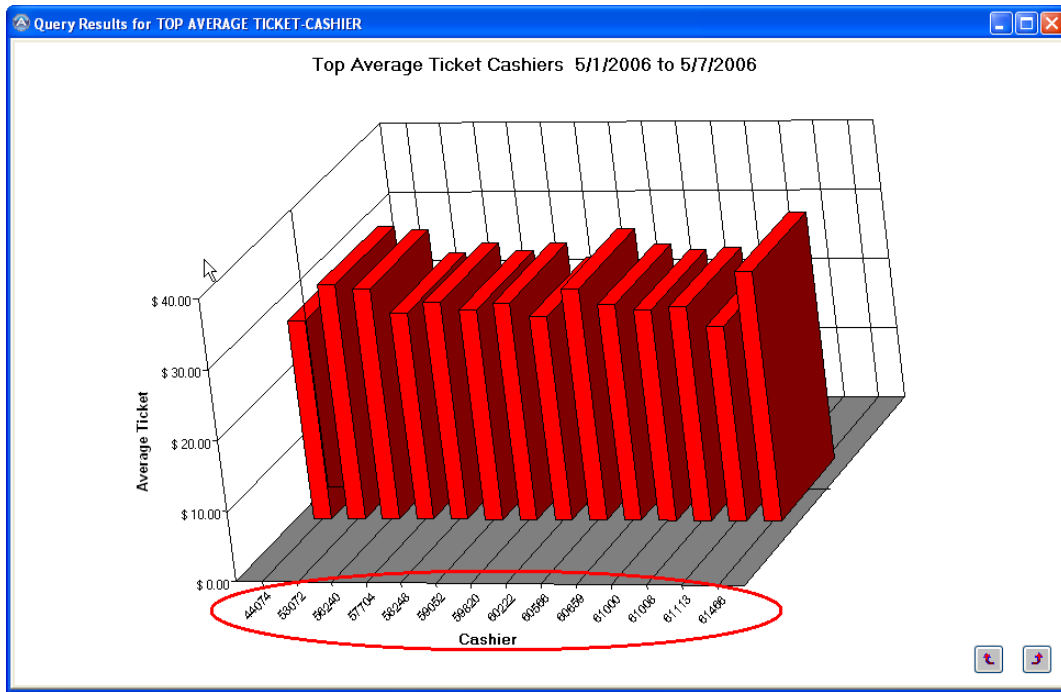


Figure 8-4: Horizontal Axis Text- 45 Degrees

CREATE A TEMPORARY GRAPH

Only System Administrators, System Managers, and Query Owners can create and permanently save graphs. Others can create temporary graphs that can be printed and exported, but not permanently saved.

How to Create A Temporary Graph

1. Run the desired query. You may want to filter the results to allow for a meaningful graph.
2. Click the **Graph** button.
3. If a graph does not yet exist, the **Graph Maintenance** dialog box will display.

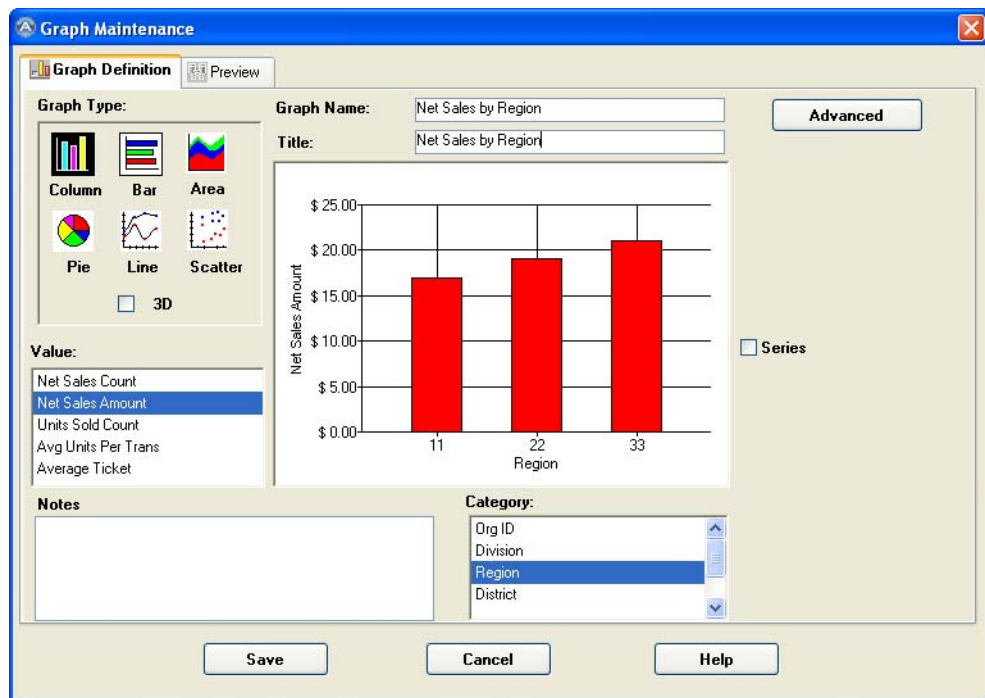


Figure 8-5: Graph Maintenance Dialog Box

4. Type in a **Graph Title**.



Only System Administrators and Query Owners will be allowed to type in a **Graph Name**.

The **Graph Name** box will be gray and will read "This is a temporary graph-name is not needed" if an Analyst is creating the graph.

5. Select a **Graph Type**.
6. Select a **Value**, which will be represented vertically, and a **Category** which will be represented horizontally. Note that you can multi-select values and categories and the legend will display accordingly.

7. Click **OK**. The graph will display. You can print the graph by clicking the **Print** button.
8. Click the **Preview** tab to preview the graph prior to saving to make sure the graph looks like what you want.
9. Click the **Report** button if you want to return to the report.

Creating a Graph from an Existing Graph

How to Create a New Graph from an Existing Graph

1. Run the graph to display it.
2. Right click the graph and select **Select/Create Graph** from the shortcut menu. The **Graph Selection** dialog box will display.

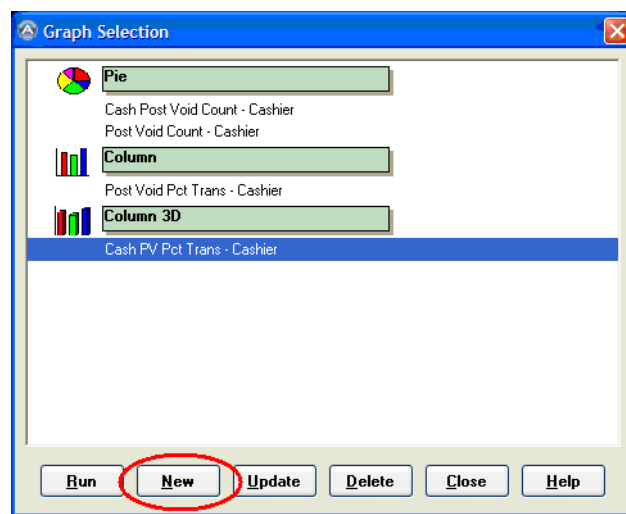




Figure 8-6: Graph Selection Dialog Box

3. Click the **New** button. The **Graph Maintenance** dialog box will display (Figure 8-5).
4. Select a **Graph Type**.
5. Enter a **Title**.
6. Select a **Value** and a **Category**.
7. Click **OK** to view the temporary graph.

COPYING A GRAPH INTO POWERPOINT

If you need to place a graph from Analytics into a PowerPoint presentation, follow the steps below.

How to Copy a Graph Into PowerPoint

1. While viewing a graph in Analytics press **[Print Screen]** on your keyboard.
2. Switch to PowerPoint, open your Presentation, and go to the slide where you want to display the graph.
3. Click the **Paste** button. The image may be too large or contain unneeded information and you may need to crop the edges of the screen.
4. With the graph selected, click the **Crop** button  on the Picture Toolbar.
5. Place the Cropping tool over a file handle  (on the corners or middle of each side edge). Click and drag to hide the part of the image you want to save.
6. Repeat step 5 for each edge of the screen.
7. Save your presentation.

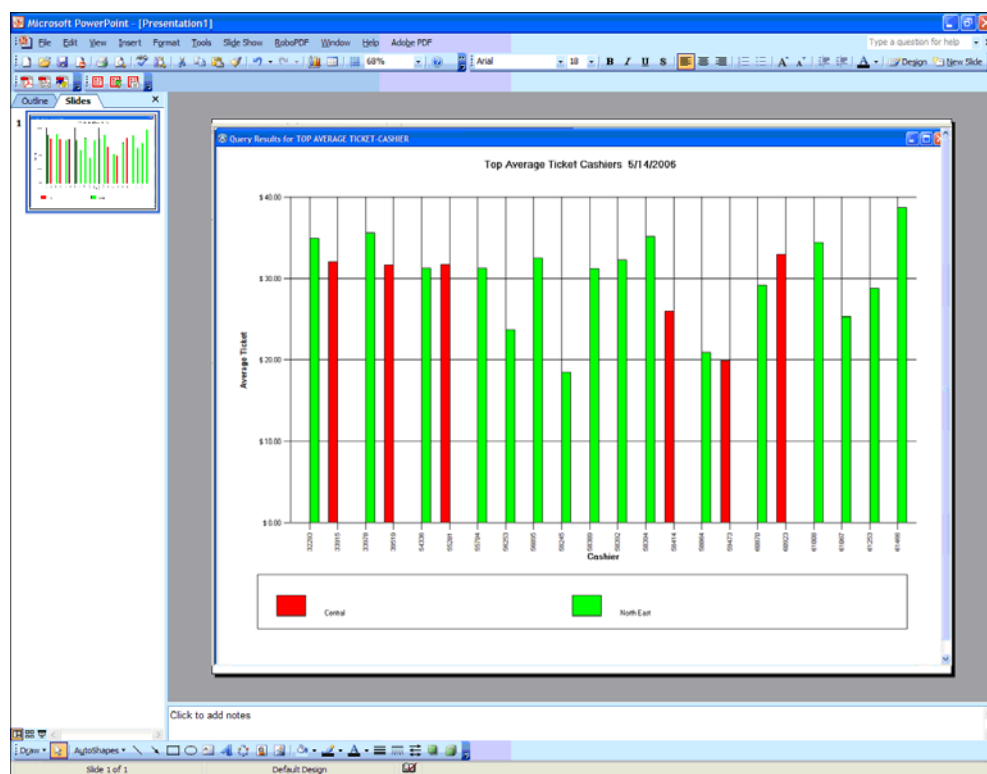


Figure 8-7: Graph in PowerPoint

CHAPTER

9

Quick Run Screen

OVERVIEW

Datavantage Analytics provides each user with the ability to personalize his or her Quick Run screen. Quick Run is a great area to save frequently used queries right at your fingertips. Similar to using Bookmarks or Favorites to quickly access frequently visited web sites, Quick Run provides shortcuts to your queries. Using the Quick Run screen eliminates the need to search through all queries to find the one you need. Each Datavantage Analytics module has its own Quick Run screen that can be customized by each user.

LEARNING OBJECTIVES

Upon completion of this section, you should be able to:

- Copy a Quick Run Screen
- Add, Edit & Delete Tabs
- Add, Edit & Delete Categories
- Run Queries from the Quick Run screen

PROCEDURES

COPYING A QUICK RUN SETUP

When you first login using your own User ID, the Quick Run screen may be blank. It is recommended that the System Administrator customize a standard screen containing frequently used category buttons and queries. Each user can then copy the setup allowing for a common starting point for everyone.

How to Copy another User's Quick Run Setup



If you have already customized your Quick Run screen, you may not want to overwrite it with another user's Quick Run set up.

1. Select **Copy Quick Run Setup** from the Administration menu.

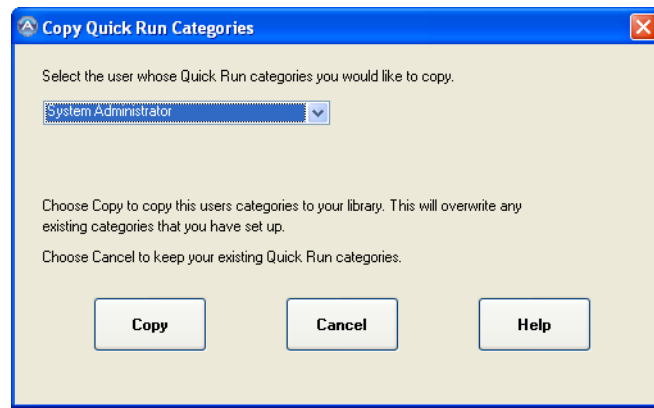


Figure 9-1: Copy Quick Run Categories

2. In the drop down list, select System Administrator (or other suggested user).
3. Click the **Copy** button.
4. When asked if you want to overwrite any existing categories, click **Yes**.

WORKING WITH TABS

To organize information in your Quick Run screen, you can create multiple tabs and save groups of related queries on their own tabs. Tabs can also be edited or deleted.

Adding a Tab

Adding a tab is an easy way to personalize your Quick Run screen. For example, you may have a suite of customized queries, which display information by LP Risk Group. You could create an LP Risk Group tab with query category buttons such as Cash Refunds, Non-Cash Refunds, and Checks. Each query grouped into these categories would display information by each risk group.

How to Add a Tab

1. Right-click anywhere on the Quick Run screen.
2. Select **Add Tab** from the short-cut menu. The Category Tab Maintenance dialog box is displayed.

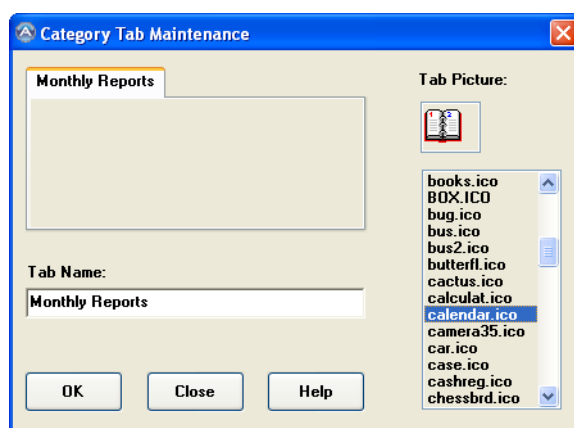


Figure 9-2: Add Tab

3. Type a descriptive name for your tab in the **Tab Name** field.
4. Double-click a picture from the **Tab Picture** list. If you skip this step, an **X** will appear next to the tab name. If this occurs, right-click anywhere on the tab and select **Edit Tab**.
5. Click **OK**.

Editing Tabs

You may want to change either the description or picture associated with an existing tab. You can make these types of changes while keeping the query buttons and queries that you access from that tab.

How to Edit a Tab

1. Click the tab you would like to edit.
2. Right-click anywhere on the tab you are editing.
3. Select **Edit Tab** from the shortcut menu.

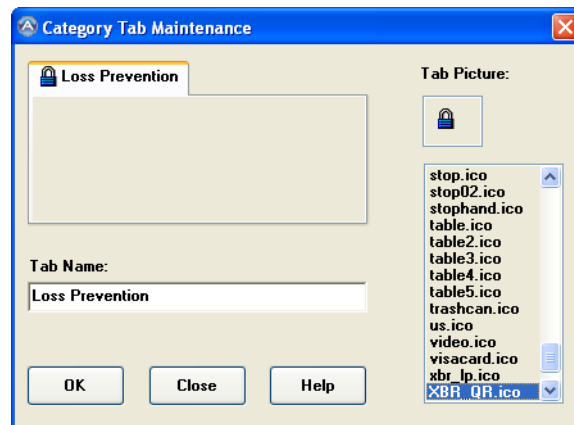


Figure 9-3: Edit Tab

4. **[OPTIONAL]** In the **Tab Name** area, modify the description of the tab.
5. **[OPTIONAL]** Double-click on a new picture from the **Tab Picture**.
6. Click **OK**.

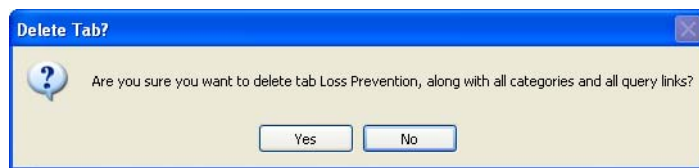
Deleting Tabs

If you decide you do not need a tab anymore you can delete it. But, it is important to know that you will delete any **Category** buttons on that tab as well as the short cuts to the queries you were running from that tab.

The actual queries are not deleted from the application. You can always add new short cuts to any **Category** buttons.

How to Delete a Tab

1. Click the tab you would like to delete so it displays in front of any other tabs.
2. Right-click anywhere on the tab you want to delete.
3. Select **Delete Tab** from the short-cut menu.
4. When you are asked if you are sure you want to delete the tab (see right), click **Yes** to confirm the deletion.



WORKING WITH CATEGORY BUTTONS

New categories can be added to any tab at any time. Query shortcuts can then be added to the category buttons, category buttons can be re-arranged on a tab or moved to a different tab.

Adding and Re-arranging Category Buttons

You may decide to organize queries by grouping them under a new **Category** button.

How to Add and Rearrange Category Buttons

1. Right-click anywhere on the tab you would like a new **Category** button.
2. Select **Create New Category** from the short-cut menu.

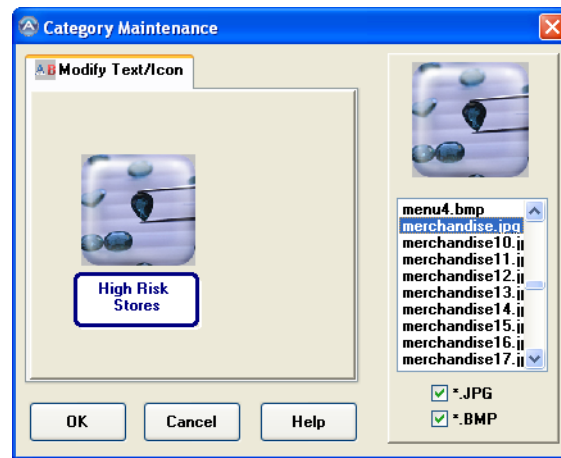


Figure 9-4: Add Category Button

3. Type in a description for the category.
4. Double click a picture to display as the category button.
5. Click **OK**. By default, your new **Category** button appears at the end of the first row of buttons.



To re-arrange categories on a tab, drag and drop them where you would like them to appear. If you drop a category button on top of an existing button, the existing button moves to the right making room for the one you are moving.

To move buttons to a new tab, drag and drop them from one tab to another.

Edit Category Buttons

You can make changes to existing and newly created category buttons at any point in time. For example, changing the name or picture associated with a category.

How to Edit a Category Button

1. Right-click on the Category button.
2. Select **Edit Category** from the short-cut menu.

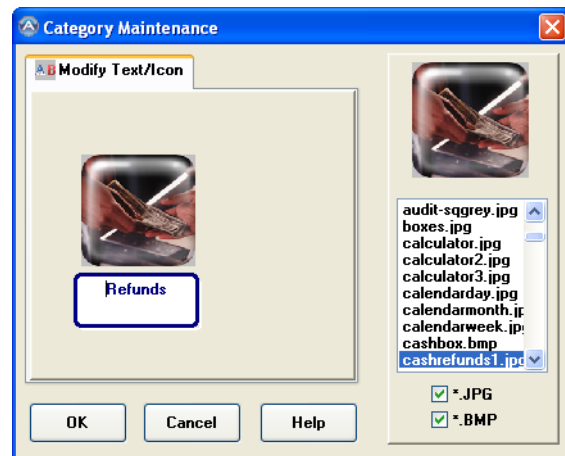


Figure 9-5: Edit Category Button

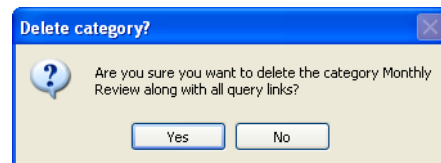
3. Make necessary changes to the name and/or the picture.
4. Click **OK**.

Delete Category Buttons

If you decide you do not need a category anymore you can delete it. But, it is important to know that you will also remove any shortcuts to the queries you were running from that button. The actual queries are not deleted from the application and can be added to different Category buttons.

How to Delete a Category Button


1. Right-click on the Category button.
2. Select Delete Category from the short-cut menu.
3. When you see a prompt similar to the one to the right, verify that the name of the Category button you intend to delete appears. Click **Yes**.



Adding Queries to Category Buttons

When you assign queries to category buttons, you are creating shortcuts to the queries that are available from the Query List. You can add new queries to Category buttons and delete them from without actually removing the queries from the system.

How to Add Queries to a Category Button

1. Click the **Quick Run**  button to display this window if it is not already displayed.
2. Click the appropriate tab name to display the Category button where you would like to add your query or graph.
3. Click the **Queries** button and select the query or graph you would like to add.
4. From the Window menu, select **Tile Vertical** so that you can view the Quick Run and the Query List simultaneously.
5. Drag the query or graph name and drop it on the appropriate Category button.

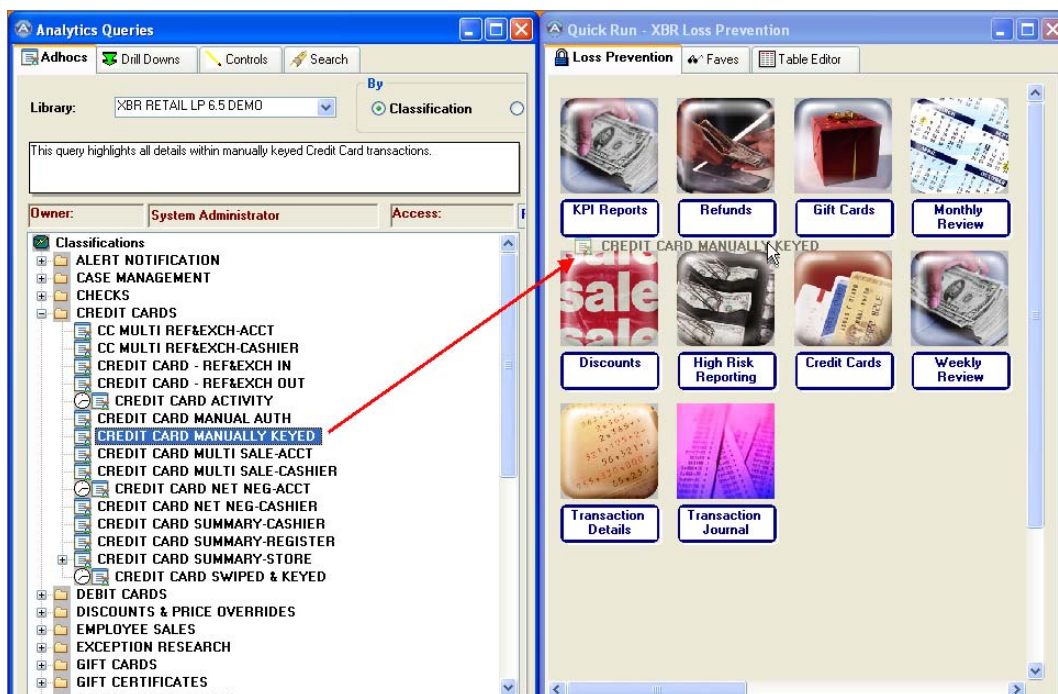


Figure 9-6: Add Query to Category Button

6. When you are finished dragging queries or graphs to Category buttons, click the **Close** button to close the Query list.

RUNNING QUERIES VIA QUICK RUN

Category buttons organize queries and graphs so that you can easily locate and run them.

How to Run Queries From The Quick Run Screen



If you close the Quick Run screen, click the **Quick Run** button to display it.



1. On the Quick Run Screen double-click a Category button.

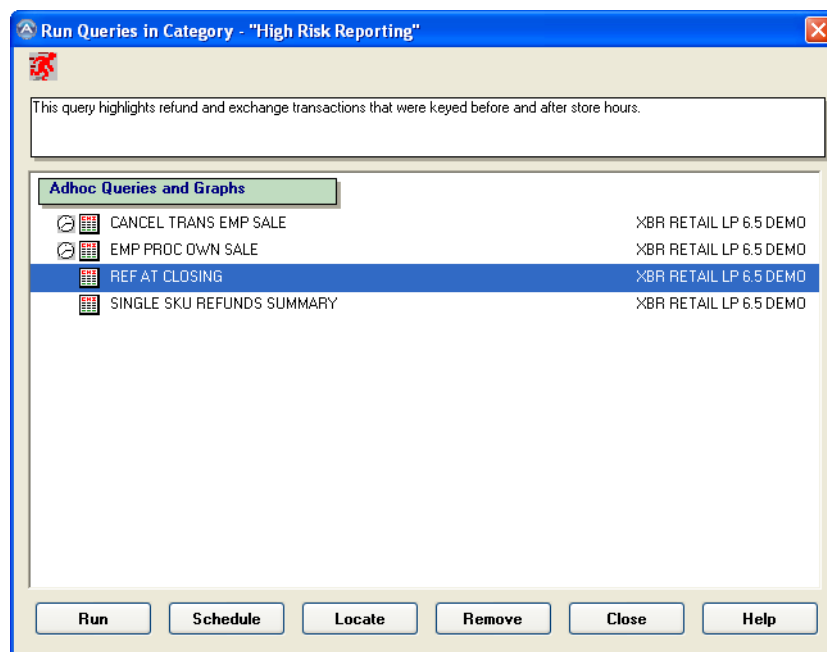


Figure 9-7: Run Query From Category Button

2. Double-click a query or graph to Run it.

In addition to running queries from the Quick Run, you can schedule or locate a query.

- To schedule a query, select the query name and click the **Schedule** button. Please refer to the Automating Queries section for scheduling details.
- To locate a query in the Queries list, select the query name and click the **Locate** button. You will be re-directed to the appropriate query type tab, library and classification in the Queries window and the query name will be highlighted.

CHAPTER

10

Controls

OVERVIEW

Control queries are used to detect and report exceptions as compared to normal activity. They identify activity that exceeds specified criteria set for a selected period of time. Controls maintain a history of exceptions, which allow users to pinpoint trends and identify compliance issues.

Exception reports generated by Controls are saved on a Review screen, whether run Immediately or Offline, until manually removed. This allows users to access detected exceptions without having to run the same query multiple times.



LEARNING OBJECTIVES

Upon completion of this section, you should be able to:

- Run and Review Control queries
- Run Top Level reporting to display only a specific number of exceptions
- Run a Control Query Offline
- Review Exception History
- Use Resolution Notes and update Watch Status
- Add associates and stores to watch lists
- Link to Adhocs
- Manage the Review Screen

MANUALLY RUNNING CONTROL POINTS

Controls detect and report exceptions in accordance to normal business activity. They are based off of existing Adhocs referred to as Control Queries. For example, the Control Query, Line Void Summary Cashier displays a summary of excessive line void activity by cashier for counts, total amounts, percentage to transactions, percentage to items, and percentage to sales. A Control Point, such as Line Void Count, is built off of this Control Query, and is used to highlight Cashiers with an excessive number of Line Void transactions.

- Control Queries are recognized on the **Controls** tab as a report icon .
- Control Points are recognized under Controls Queries as a pencil tip icon .

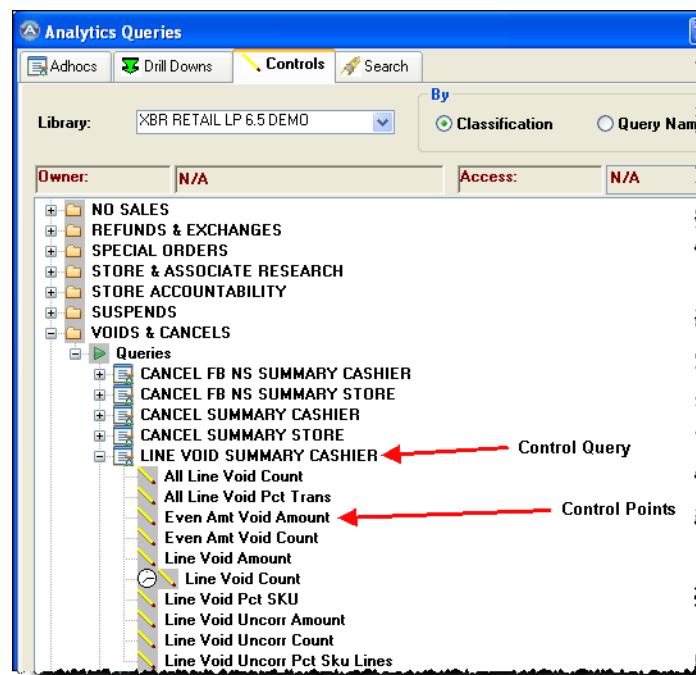


Figure 10-1: Control Query/Points

Although Control Points can be run manually, it is recommended that they be scheduled to run automatically and the user can review the results via the Review screen. See Scheduling Queries and Alerts in the *Fundamental Training Guide* for information on scheduling queries to run automatically.

Control Points build a history of activity each time they are run. If a user runs a Control Point for a given time period and establishes history, re-running the Control Point for the same time period and assigning it to the same Review screen will override the previous exceptions and any investigative work associated with the exceptions. Therefore it is important to ensure that multiple users running the same Control Points whose results display on a common Review screen do not override historical data. When an exception set is about to be replaced, the system will prompt the user to confirm or cancel the replacement.

Threshold Maintenance

Owners of a query or users with System Administrator or System Managers can maintain control points and modify control point threshold criteria as needed. Users can set custom threshold values for different segments of a company. For example, higher activity stores may have a greater cash refund threshold than the lower activity stores.

Assigning Exceptions

When Control Points are run, the exceptions are assigned to a user's Review screen. Every user has his/her own Review screen. It is recommended that users store exceptions on a common review screen, such as the System Administrator's, if multiple users are reviewing overlapping regions. When control point exceptions are accessed from one common review screen, it alleviates the potential of duplicating efforts in investigating and tracking progress on suspicious cases. The common review screen allows users to easily share notes on their investigative progress. This common review screen is selected by using the **Assign Exceptions To** text box when running a control point. Otherwise, users may review exceptions on their own Review screen if they are solely responsible for a given region or group of stores.

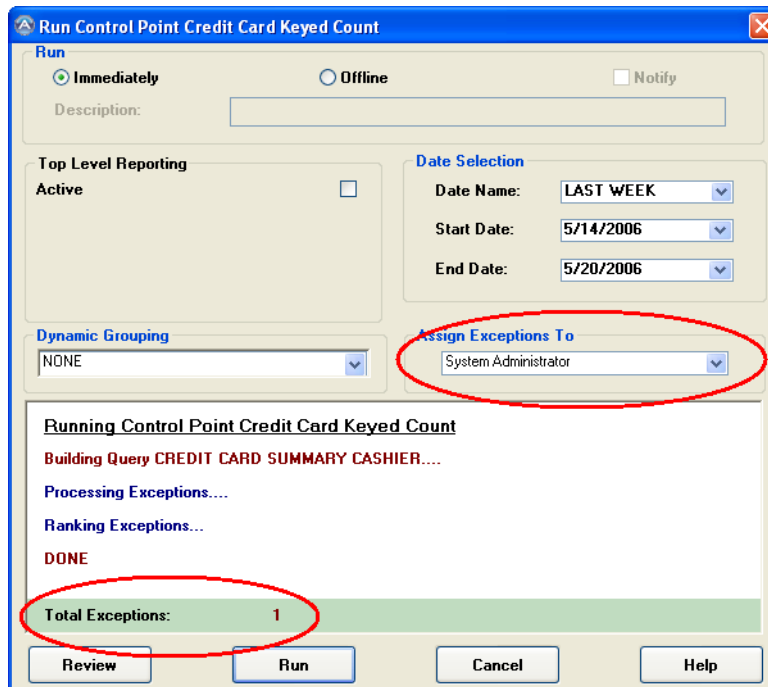



Figure 10-2: Assigning Exceptions

PROCEDURES

How to Manually Run A Control

1. Click the **Queries**  button.
2. Select the **Controls** tab and expand a *Classification*. Expand Queries to list the Control query and the control points associated with that Control query.
3. Double click a **Control Point**.
4. Select **Immediately** or **Offline**. Immediately will run the exceptions and display them on the assigned review screen right away. Offline will run the exceptions in the background, which allows users to continue reviewing exceptions. If you select Offline the exceptions will display on the review screen which was assigned (step 8) once the control has been run. This will depend on the process time that was set up during installation i.e. every 10 minutes.
5. **[OPTIONAL]** If you want to display the top-level records, activate the **Top Level Reporting** check box. The Top Level Field is set to Rank Score/Overall score to determine the top rows. Type the number of rows to be returned in the **Top Level rows** box.

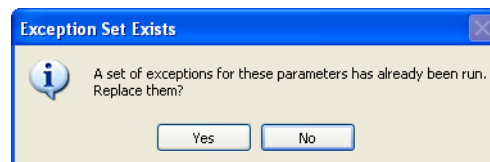


If you choose Top Level Reporting, the query will find all the exceptions but will only display the number you requested (in the Top Level Rows) on the Exception list window.

6. In the **Date Name** area, select the time frame for which the query will run.
7. **[OPTIONAL]** **Specify Criteria** if you would like to narrow down the results. You can specify a specific region, store, district etc, depending on what was set up in the Control query by the owner. Click the down arrow to see a list of options or type in your option in the text box.
8. In the **Assign Exceptions To** area, select the Review screen where the exceptions should display.
9. Click the **Run** button. You will see the control query run and count the number of exceptions found if you choose Immediately. If however you choose Offline you may move on to research other exceptions.



*When a Control is rerun for a date range that was already reported and assigned to the same Review screen, an Exception Set Already Exists message displays. If anyone has already begun working on this exception, click **No** to avoid overwriting his or her work.*



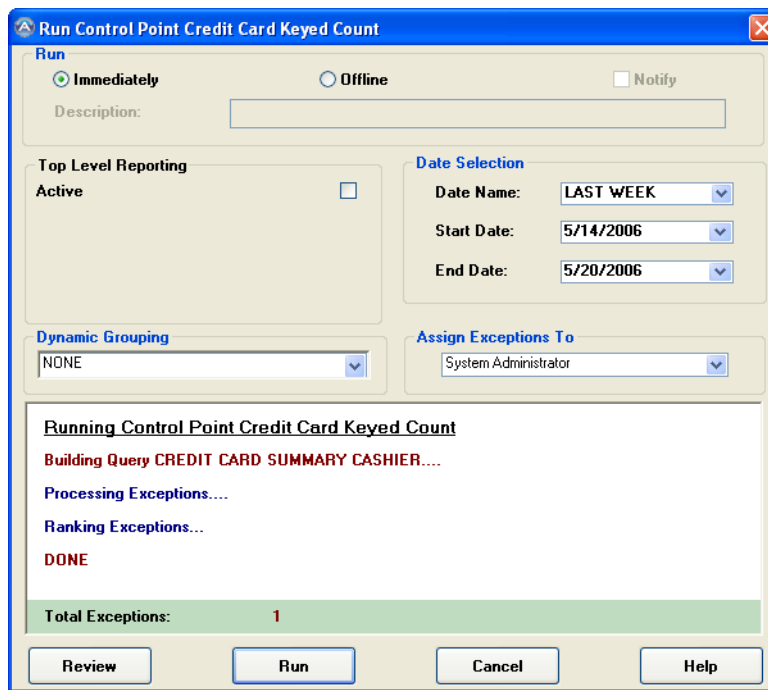



Figure 10-3: Run A Control Point

How to Open the Review Screen

1. Click the **Review**  button. The Review Screen will appear with a **List of Exception sets** for all of the Control Points that have run.

Control Name	Period	Number of Exceptions	Percent Resolved	Run Date	Time	Run By
Cashier						
CONTROL GROUPS	Library: XBR RETAIL LP 6.5 DEMO					
My High Risk Group - WPL	5/1/2006 to 5/7/2006	380	0%	7/8/2009	15:12	Train 6
	5/8/2006 to 5/14/2006	375	0%	7/8/2009	15:14	Train 6
	5/15/2006 to 5/21/2006	385	0%	7/8/2009	15:16	Train 6
	5/22/2006 to 5/28/2006	382	0%	7/8/2009	15:19	Train 6
CREDIT CARD SUMMARY CASHIER	Library: XBR RETAIL LP 6.5 DEMO					
Credit Card Keyed Count	5/14/2006 to 5/20/2006	1	0%	8/20/2009	10:47	Train 6
MY REFUND EXCEPTIONS - WPL	Library: XBR RETAIL LP 6.5 DEMO					
Total Refund Amount	5/14/2006 to 5/20/2006	31	0%	7/9/2009	14:30	Train 6
NO SALES SUMMARY CASHIER	Library: XBR RETAIL LP 6.5 DEMO					
No Sale Count	5/22/2006 to 5/28/2006	79	0%	7/8/2009	14:49	Train 6

Figure 10-4: Exception Review Screen

2. Select the review screen (for example, System Administrator) used to organize Controls. In this step you are either selecting the ID of the user to whom the Exceptions were assigned if you are using a common Review screen, or your own User ID.
3. The buttons near the top of the window are discussed on page 10-13.

UNDERSTANDING THE REVIEW SCREEN

When **Controls** are run they are assigned to a review screen. Depending on the size and structure of your organization, it is recommended that a common review screen be used to store all exceptions. This ensures that each user can look in one area to review ALL exceptions and avoids a duplication of efforts. If there is no risk of duplicating efforts, then users can use their own review screen.

To review the exceptions that were detected, users can click the **Review** button. In the List of Exception Sets window, users will see:

- The name of the Control Query and Control Point queries that were run.
- The time period during which the exceptions occurred.
- The number of exceptions found for the specified time period. The number in the parenthesis () is the number the user specified in the Top Level Reporting section and only these exceptions will display on the following screen.
- The percent resolved which tracks investigative progress for a specific set of exceptions.
- The date and time that the Control Point ran.
- The user that ran the Control Point.

REVIEWING EXCEPTIONS

The actual exception activity that occurred during a specified time frame can be viewed by:

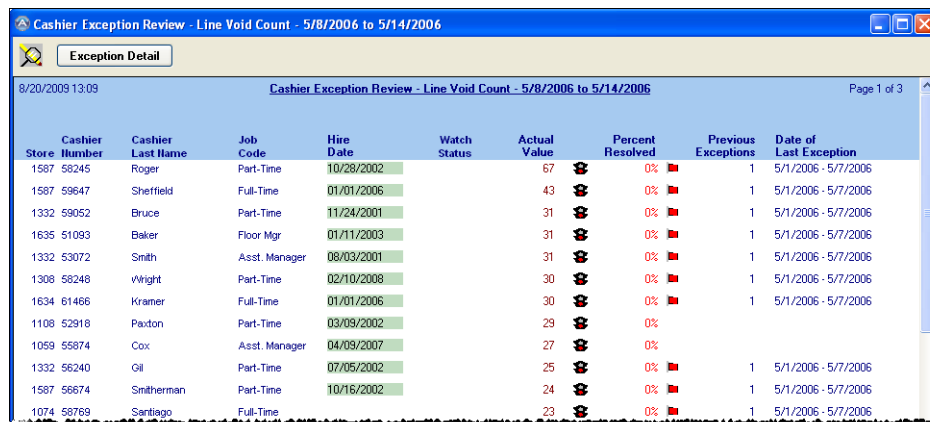
- Double clicking the control point or time frame of interest in the Review screen or
- Selecting the control point or time frame of interest from the Review screen and clicking the **Review Set** button.

The following information is available in the **Exception Review** screen:

- **Actual Value** displays the actual value of store or associate activity according to the criteria for the control that is run. For example an actual count or amount that exceeds the threshold for the control point. This window is sorted by the highest value, which indicates the worst offender. For a Control Group the actual value displays in each Control column. Next to the actual value in parenthesis is the individual rank for that specific control.
- **Rank Score** - Only displays if indicated on the Control Target. The rank score is a calculation of the difference between the criteria value that was set and the actual activity that occurred.

Chapter 10: Controls



- **Percent Resolved** - Allows users to track the progress of their investigations. There are 3 status levels to choose from:
 - Open (0%)
 - In Progress (50%)
 - Closed (100%)
- **Previous Exceptions** - Displays the number of occurrences from history that this employee or store has been an exception for this control point. The date of the last exception occurrence is noted next to the number of previous exceptions.



The screenshot shows a software window titled "Cashier Exception Review - Line Void Count - 5/8/2006 to 5/14/2006". It contains a table with the following columns: Store Number, Cashier Last Name, Job Code, Hire Date, Watch Status, Actual Value, Percent Resolved, Previous Exceptions, and Date of Last Exception. The table lists 15 cashiers with their respective details.

Store Number	Cashier Last Name	Job Code	Hire Date	Watch Status	Actual Value	Percent Resolved	Previous Exceptions	Date of Last Exception
1587 58245	Roger	Part-Time	10/28/2002		67	0%	1	5/1/2006 - 5/7/2006
1587 59647	Sheffield	Full-Time	01/01/2006		43	0%	1	5/1/2006 - 5/7/2006
1332 59062	Bruce	Part-Time	11/24/2001		31	0%	1	5/1/2006 - 5/7/2006
1635 51093	Baker	Floor Mgr	01/11/2003		31	0%	1	5/1/2006 - 5/7/2006
1332 53072	Smith	Asst. Manager	08/03/2001		31	0%	1	5/1/2006 - 5/7/2006
1308 58248	Wright	Part-Time	02/10/2008		30	0%	1	5/1/2006 - 5/7/2006
1634 61466	Kramer	Full-Time	01/01/2006		30	0%	1	5/1/2006 - 5/7/2006
1108 52918	Paxton	Part-Time	03/09/2002		29	0%		
1059 55874	Cox	Asst. Manager	04/09/2007		27	0%		
1332 56240	Gil	Part-Time	07/05/2002		25	0%	1	5/1/2006 - 5/7/2006
1587 56674	Smitherman	Part-Time	10/16/2002		24	0%	1	5/1/2006 - 5/7/2006
1074 58769	Santiago	Full-Time			23	0%	1	5/1/2006 - 5/7/2006

Figure 10-5: Previous Exceptions

- A traffic light  appears when an Alert threshold has been exceeded or when there are excessive repeat occurrences.
- A red flag  appears if there have been previous exceptions in history.

Buttons on Exception Review Screen

This Button...	Does This...
Exception Detail	Displays more information about the selected exception record(s). You could also double-click the record to display the exception details.
Store Detail	Displays information from your Store Master file, allowing you to see a store manager's name or the store's telephone number.
Associate Detail	Displays information from your Associate Master file allowing you to review information such as an associate's job code or date of hire.

How To Review Exceptions




1. Click the **Review** button. The **List of Exception Sets** screen appears with a list of all the Control Points and the numbers of exceptions found for each point are listed.
2. Select the user's Review screen that the exceptions are stored in.
3. Double click an **Exception Set** to review the exceptions.
4. From the Exception Review screen you can:
 - Select a row and click the **Exception Detail** button to review specific details about the exception being investigated.
 - **[OPTIONAL]** Select a row and click the **Store Detail** button (if available) to view specific store information from the Store Master such as Store Manager name and Store phone number. Close this window to return to the Exception Review screen.
 - **[OPTIONAL]** Select a row and click the **Associate Detail** button (if available) to view specific information about the employee from the Employee Master such as hire date and job code. Close this window to return to the Exception Review screen.

EXCEPTION DETAILS

The **Exception Details** screen displays the details of the actual exception activity: the actual value versus the threshold value that the control point was measured on, the percent difference between the actual activity and the threshold value, and the rank of the exception compared to the other exceptions in the list. Users can also adjust the status of resolving the exception and view a graphed depiction of the exception history. To view the exception details for any listed exception, select the exception and click the **Exception Details** button.


The following is a list of features that can be viewed in this window:

- The **Control Name**, **Target**, and **Date Range** are at the top of the query - This shows you the control that was run along with the Store and/or cashier you selected from the Exception Review screen.
- **Control Point and Measure** - Indicates which was used to find the exceptions.
- **Start and End Dates** - The dates the exception occurred between. If there are multiple dates listed than there have been previous exceptions for this store or cashier.
- **Weight** - Single control points are assigned a weight of one, which is used in the Rank Score calculation.
- **Actual Value** - The actual activity that occurred during the time frame that the control point ran.
- **Threshold Value** - The customized criteria above which to detect exceptions.
- **Rank** - The placement of this exception compared to all of the other exceptions with 1 being the worst offender.
- **Status** - Can be changed to the following options: Open, In Progress or Closed.
- **Resolution Note** icon  - Displays if a Resolution note has been created for this exception.



Read Only users have the ability to add/edit these notes if given permission by the System Administrator within their user profile.

- **Previous Exceptions** icon - A red flag  appears if there have been previous exceptions in history.

- **Alert icon** - A traffic light  appears when an Alert threshold has been exceeded or when there are excessive repeat occurrences.

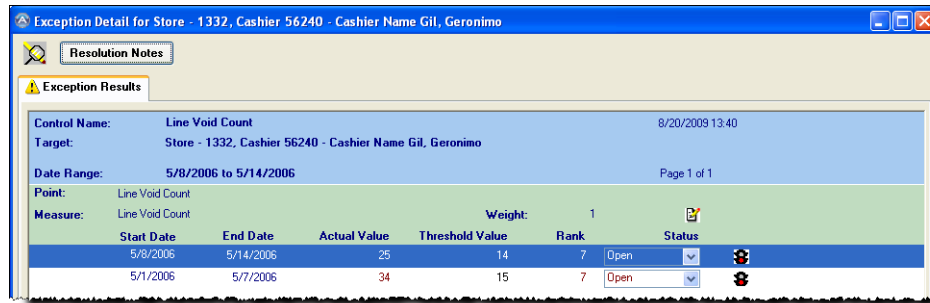




Figure 10-6: Exception Detail

Exception History Graph

How To View the Exception History Graph

1. From the **Exception Detail** window, click the **Graph** button  to view the default graph.



To return to the data again, click the **Report** button .

2. In the **Value** area, you can change the Value options to view the exception values for both actual and threshold to compare differences. For control groups, you can select multiple **Measures** to display in the graph.

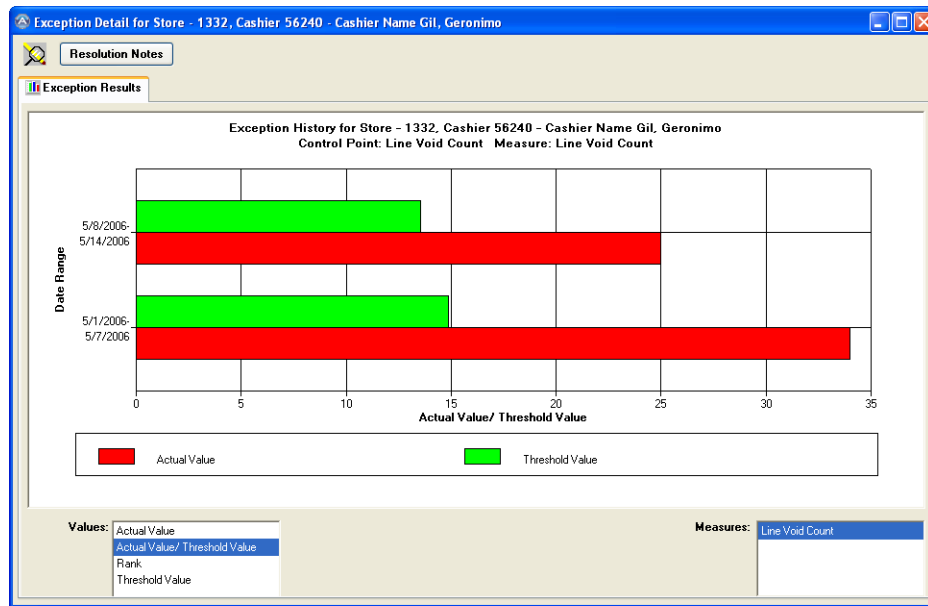




Figure 10-7: Exception History Graph

Linking to Adhoc Queries

How To Link to Adhocs

1. From the **Exception Detail** window, verify the exception is selected. You can use the **[Ctrl]** or **[Shift]** keys to select more than one row to link on multiple weeks of history.
2. Click the **Link**  button. If there is more than one query available to link to, the **Select a Query to Link to** dialog box will display.
3. Double click a query from the list to run and display the results.
4. Upon reviewing one or more Adhocs, click the **Exception**  button on the Window toolbar or use the Window menu option to locate the **Exception Detail** window to return to the **Exception Detail** window to update the *Status* or post a *Resolution Note*.


TIP

Click the *Exception* button to quickly return to the *Exceptions* window.

Changing the Exception Status

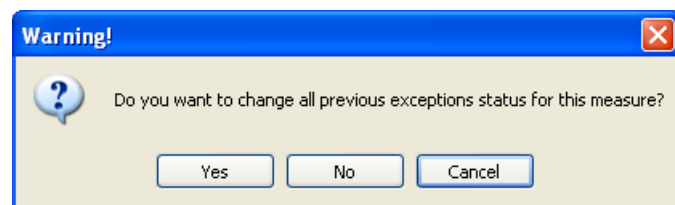
How To Change the Exception Status

1. From the **Exception Detail** window, click the down arrow on the **Status** list box.



To see the Percent Resolved update on the List of Exception Sets screen, the List of Exception Sets screen needs to be closed and reopened.

2. Select **Open** (0% resolved), **In Progress** (50% resolved) or **Closed** (100% resolved). If you select the most current date range, you will be asked if you want to update all previous exceptions to the same status.



3. Click **Yes** to change all the previous status fields.
Click **No** to only change the selected status field.


Resolution Notes

How To Write Resolution Notes

1. From the Exception Detail window, click the **Resolution Notes** button.



Notes are saved with time stamps that note the author, date and time the note was written. Each note is also given a number for identification purposes.

2. Click the **Add a New Note** button and type a note.
3. Click the **Apply** button.
4. A Resolution note icon  is displayed in the **Exception Detail** window when a note has been written.
5. To **Update** or **Delete** a note:
 - a. Select the number of the Note from the drop down list.
 - b. Click **Update Note** or **Delete Note**. The text of the note appears in the lower text box.
 - c. If you are updating the note, make any desired changes and click **Apply Update**.
If you are deleting the note, click **Apply Delete**.



Only System Administrators can delete Resolution Notes; however, all security levels can edit Resolution Notes.

CLEANING UP THE REVIEW SCREEN

Exception sets remain in the Review window until they are manually removed. It is recommended that when exceptions have been completely investigated, users move them to a closed sets folder or commit them to history.

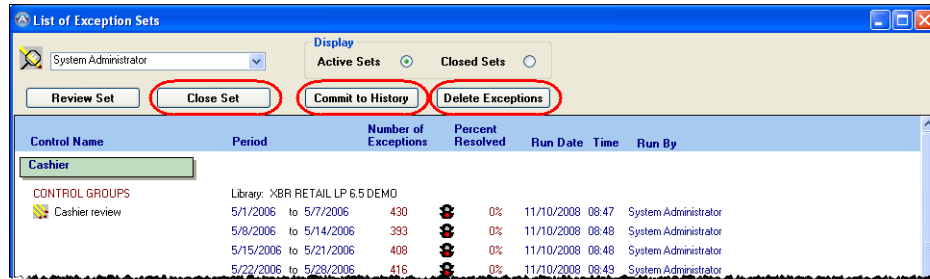




Figure 10-8: Review Screen

Button	Description
Close Set	Moves an Exception Set to the Closed Sets window. Select the set you would like to move and click the Close Set button. To work with this exception set again, click the Closed Sets radio button. All closed exception sets will be listed.
Commit to History	Removes the selected Exception Set from the Review screen but retains the history of occurrences. Use this button when it is no longer necessary to edit Resolution Notes or link to Adhocs to investigate more detail about stores or associates in an exception set. The next time a store or associate from this Exception Set is reported in the same risk category, they will be flagged for previous activity in history.
Delete Exceptions	Permanently removes the Exception Set from the Review screen. The store and associate exception information will no longer be available for history.

DEFINING THE THRESHOLD VALUE

System Administrators, System Managers and Query Owners are the only users that can adjust threshold criteria.

How to Define a Threshold Value

1. Click the **Queries**  button.
2. On the **Controls** tab expand a Classification and then expand Queries to list the Control query and the control points associated with that Control query.
3. Select a **Control Point**.
4. Click the **Open**  button. The **Control Point Maintenance** dialog box displays with 3 tabs:
 - The **Criteria Level** section is used to create custom criteria levels. Businesses that prefer to set thresholds based on business volume, can utilize this area to specify those levels and then indicate the preferred thresholds for each of the specified levels as well. For example, a high volume store might have a Cash Refund and Exchange Total threshold by cashier of -\$150.00 but a low volume store could be set at a threshold of -\$75.00.
 - The **Default Criteria** area is where users select the fields that will be used as measures and then indicate thresholds and alert values accordingly.
 - The **Alert** area allows users to create additional alerts based on a history of exception occurrences as well as attaching policy notes and alert messages.

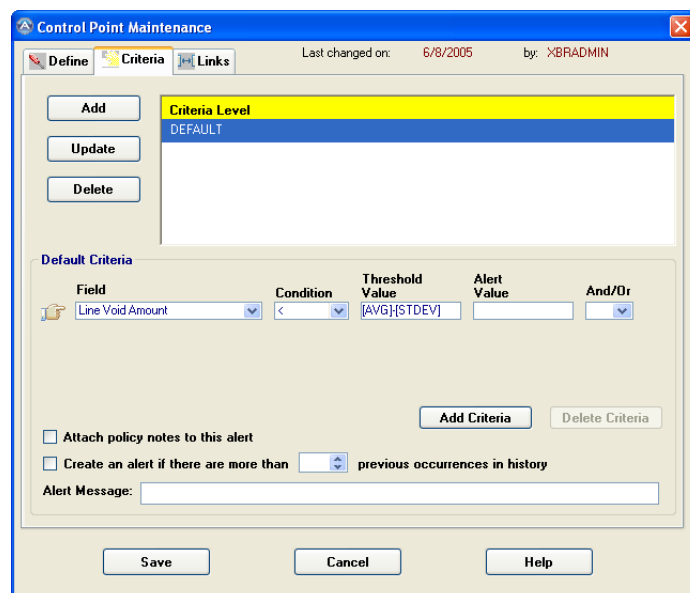


Figure 10-9: Control Point Maintenance Dialog Box

5. In the **Control Point Maintenance** dialog box, click the **Criteria** tab.

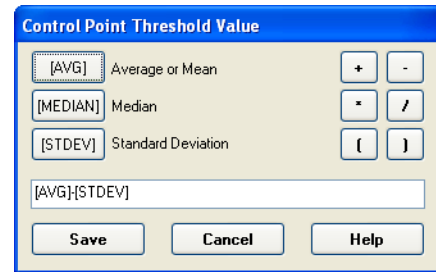


In the Criteria Level area, "Default" refers to a standard for the entire organization. Thresholds can be customized for different areas of the organization by using the **Add**, **Update**, and **Delete** buttons in the **Criteria Level** section at the top.

6. Select the field that will act as a measure for the control point from the **Field** drop-down list.
7. Select an operator that best matches the mathematical expression to detect exceptions from the **Condition** drop-down list.
8. Click in the **Threshold Value** text box and type a value or double click in the **Threshold Value** text box and use the **Control Point Threshold Value** window to create an automated calculation.
9. Click the **Save** button.
10. Close the **Control Point Maintenance** dialog box.

How To Create Calculated Thresholds

1. In the **Control Point Maintenance** dialog box, click the **Criteria** tab.
2. Double-click in the **Threshold Value** text box. The **Control Point Threshold Value** dialog box is displayed and can be used to create an automated calculation.
3. Click the **AVG**, **MEDIAN**, or **STDEV** buttons and operator buttons to create the necessary mathematical expression.
4. Click the **Save** button for the **Control Point Threshold Value** dialog box.
5. Click the **Save** button for the **Control Point Maintenance** dialog box.
6. Close the **Control Point Maintenance** dialog box.



How To Create Custom Thresholds

Custom thresholds can be created for varying segments of the organization. For example, thresholds can be set differently for higher volume stores versus lower volume stores.

1. In the **Control Point Maintenance** dialog box, click the **Criteria** tab.
2. Click the **Add** button from the **Criteria Level** section at the top.
3. In the **Filter** window, double click the Field (Column) name so that it appears in the filter box above.



Figure 10-10: Custom Threshold Value Filter

4. Click or type the appropriate operator (<, >, =, in, etc.)
5. Complete the filter by typing in the necessary value(s).
6. Click **OK**.
7. Select the Filter name that was just created in the **Criteria Level** section.
8. Click in the **Threshold Criteria** box and type in a more realistic value for this specifically defined filter or group (Figure 10-11).

The screenshot shows the 'Control Point Maintenance' window with the 'Criteria' tab selected. The 'Criteria Level' section shows 'Store IN (2,15,38)' and 'DEFAULT'. The 'Criteria for Store IN (2)' section shows a table with columns: Field, Condition, Threshold Value, Alert Value, and And/Or. The 'Field' is 'Line Void Amount', the 'Condition' is '<', and the 'Threshold Value' is '250', which is circled in red.

Field	Condition	Threshold Value	Alert Value	And/Or
Line Void Amount	<	250		

The screenshot shows the 'Control Point Maintenance' window with the 'Criteria' tab selected. The 'Criteria Level' section shows 'Store IN (2,15,38)' and 'DEFAULT'. The 'Default Criteria' section shows a table with columns: Field, Condition, Threshold Value, Alert Value, and And/Or. The 'Field' is 'Line Void Amount', the 'Condition' is '<', and the 'Threshold Value' is '-100', which is circled in red.

Field	Condition	Threshold Value	Alert Value	And/Or
Line Void Amount	<	-100		

Figure 10-11: Different Threshold values

CREATE AN ALERT FOR A CONTROL

How To Create Alerts

1. In the **Control Point Maintenance** window, click the **Criteria** tab.
2. For an alert value, click in the **Alert Value** text box and type in an accurate value. The alert will automatically be generated when the control point is run.



If you are not already in the **Control Point Maintenance** window, then the Control Point needs to be opened first prior to creating alerts.

The screenshot shows the 'Control Point Maintenance' window with the 'Criteria' tab selected. The window has a title bar with a close button. Below the title bar, there are tabs for 'Define', 'Criteria', and 'Links'. The 'Criteria' tab is active, showing a table with two rows: 'Criteria Level' (Store IN [2,15,38]) and 'DEFAULT'. To the left of the table are buttons for 'Add', 'Update', and 'Delete'. Below the table, there is a section for 'Default Criteria' with fields for 'Field', 'Condition', 'Threshold Value', 'Alert Value', and 'And/Or'. The 'Alert Value' field is circled in red and contains the value '-250'. Below this section, there is a checkbox for 'Attach policy notes to this alert' and a checkbox for 'Create an alert if there are more than 3 previous occurrences in history'. The 'Alert Message' field contains the text 'Investigate high refunds'. At the bottom of the window are buttons for 'Save', 'Cancel', and 'Help'.

3. Check the **Create an alert if there are more than "?" previous occurrences in history** check box to create an alert for a target that repeatedly exceeds the thresholds. Use the arrows to specify the quantity of occurrences that should occur before an alert is generated.
4. **[OPTIONAL]** Click in the **Alert Message** text box and type a message that will appear with the alert.
5. Click **Save**.
6. Close the **Control Point Maintenance** window.

ALLOWING ANALYTICS TO DETERMINE A CONTROL POINT THRESHOLD

In the control point setup on the criteria tab you can let Analytics calculate an appropriate threshold. Instead of designating a specific threshold amount or quantity (such as Post Void Total >\$2,000) you can use such functions as:

Post Void Total > Chain Average

or

Post Void Total > Chain Average plus standard deviation

Average/Mean: The mean is the average for a set of numbers. The mean is calculated by adding together all of the numbers in a group or set of numbers and dividing by the count of numbers in that group.

Example: To find the mean of the following set of numbers: 2, 9, 3, 16, 5:

1. Add them together: $2+9+3+16+5 = 35$
2. Divide by the count of the numbers in the group (5): $35/5 = 7$
3. The mean in this example is therefore 7

Median: The median is the number that falls exactly in the middle of a group of numbers. To find the median, first arrange the set of numbers from lowest to highest. Next count off the numbers in pairs of lowest and highest until the middle number is reached.

Example: Using the same set of numbers as above (2, 9, 3, 16, 5):

1. Rearrange them from lowest to highest: 2, 3, 5, 9, 16
2. Count them off in pairs: (2, 16), (3, 9)
3. The only remaining number, 5, is the middle number and therefore the median

Standard Deviation: The **Standard Deviation** measures the disbursement of a group of numbers (in other words, how spread out a set of values is). It is generally represented by a **Bell Curve** and is calculated by taking the square root of the variance. The variance how far away each value is from the average of all the values and is calculated by finding the average of the sum of the square of the difference between the raw number and the mean (average).

Example: Using the following set of numbers: 2, 9, 3, 16, 5

1. Find the average (mean) of all the values: $(2+9+3+16+5)/5 = 7$

2. Find the deviation by subtracting the average from each value:

$$2 - 7 = -5$$

$$9 - 7 = 2$$

$$3 - 7 = -4$$

$$16 - 7 = 9$$

$$5 - 7 = -2$$

3. Square the deviation for each value:

$$(-5)^2 = 25$$

$$(2)^2 = 4$$

$$(-4)^2 = 16$$

$$(9)^2 = 81$$

$$(-2)^2 = 4$$

4. Find the variance by calculating the average of the squared deviations:

$$\frac{25 + 4 + 16 + 81 + 4}{5} = \frac{130}{5} = 26$$

5. Find the square root of the variance: the square root of 26.0 = 5.1

In this example the standard deviation is 5.1. What this means is that most of the data (68%) falls within ± 5.1 points of the mean (or one standard deviation). In other words, if the mean is 7, most of the data falls between 1.9 ($7-5.1$) and 12.1 ($7+5.1$). Since 2, 3, 5, and 9 all fall within this range, 4 out of the 5 numbers (or 80% of the numbers) are within ± 1 standard deviation of the mean.

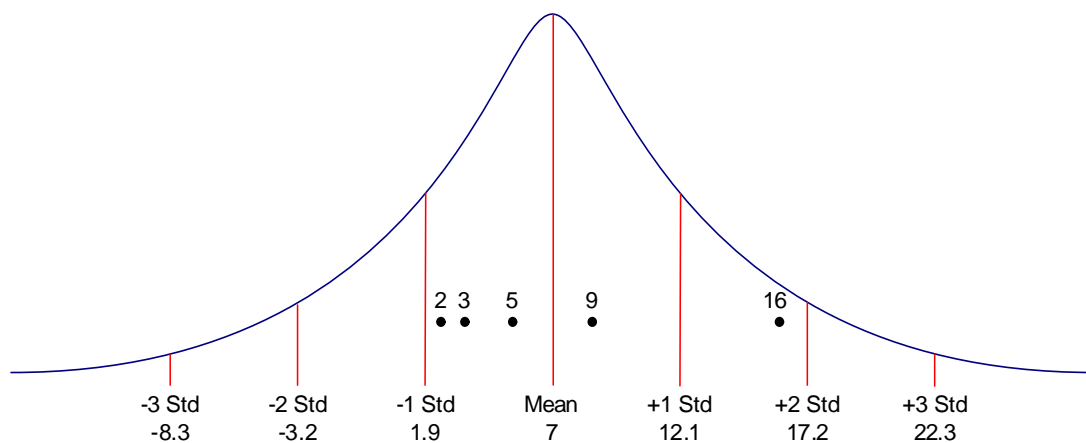


Figure 10-12: Standard Deviation

USING STORE AND EMPLOYEE WATCH LISTS



If you have upgraded from version 4.x or prior, this functionality may not be available. Contact your Micros-Retail Representative for more information.

The Watch status functionality is used to make users aware of Stores and/or Employees that need to be monitored due to questionable activity. A status such as warning, watch or investigate can be assigned by simply right-clicking in any query results that contain a Store and/or Employee number. Once Stores or Employees have been assigned a Watch Status, you can easily review them by running a watch list Adhoc - **Watch List Associates** or **Watch List Stores**. The Watch Status field exists in the Store and Employee Master Files and can be brought in to a query to enhance analysis.



Please refer to the *Intermediate Training Guide* for adding fields to queries.

For example, a cashier can be placed on watch for having excessive credit card refund activity. If the watch status field exists in a Post Void query and the cashier shows up in the report, a user will be able to see the watch status flag. By reading the watch status notes, a user can determine why the cashier was placed on watch. The status stays with the cashier number regardless of the activity that caused it.

There are two methods for assigning a **Watch Status**:

- Right-click to use a shortcut method to assign or update a Store or Employee Watch Status and date. Also, add comments explaining why an associate was placed on watch. These steps are explained below.
- Use **Table Editor** to assign or update a Store or Employee Watch Status and date. Also, add comments explaining why an associate was placed on watch.



Please refer to the *Intermediate Training Guide* for information about using Table Editor.



Read only users can edit Store and Associate Watch status.

How to Add Stores or Employees to a Watch List

1. Run a Control query.
2. Select the Store(s) or Employee(s) to place on watch.



For Adhoc queries, use the **[Ctrl]** key to select non-adjacent multiple rows or the **[Shift]** key to select consecutive rows.

3. Right-click anywhere in the report.
4. Select **Update Employee Watch Status** or **Update Store Watch Status**. When you right-click in a query that has both Store and Employee number fields, both Store and Employee watch list options are available. When reporting at the Store level, only the Store watch list option is available.
5. Select the appropriate **Watch Status** from the drop down list.



TIP

Select **No Status** to remove a Store or Employee from the Watch list.

A screenshot of a software dialog box titled "Update Employee Watch Status". The dialog has a blue title bar with a close button (X) in the top right corner. Inside, there are five input fields: "Store #" with the value "1108", "Cashier #" with the value "52918", "Name" with the value "Lonie Paxton", "Watch Status" which is a dropdown menu currently showing a downward arrow, and "Watch Date" with the value "08/21/2009". Below these fields is a "Notes" section with a text area containing the text "Investigate high number of returns.". At the bottom of the dialog are two buttons: "Update" and "Close".

Store #	Cashier #	Name	Watch Status	Watch Date
1108	52918	Lonie Paxton		08/21/2009

Notes
Investigate high number of returns.

Update Close

Figure 10-13: Update Employee Watch List

6. Today's date appears as the **Watch Date** but you can type a new date if you would like.
7. Type notes in the **Notes** text box.
8. Click the **Update** button.

How to Run a Watch List Query



You can run a Watch List Adhoc query to review which Stores and Employees have been placed on watch status.

1. From the Adhocs queries list, locate the **Store & Associate Research** classification (see right).
2. Select either the **Watch List Associates** or **Watch List Stores** query.
3. Click the **Run** button. Note the date range will default to None.
4. Review the results. You can right click to update the Store or Employee Watch Status.



C H A P T E R

11

Scheduling Queries, Alerts, and EVD Reports

OVERVIEW

You can automate queries by scheduling them to run automatically on a regular basis. By automating Adhocs, the query results can be waiting in the My Reports window, on a printer, in an e-mail, or on a network drive when you come into the office.

Users can set specific criteria for scheduled queries that will create an alert. Alerts can be reviewed upon logging into Analytics, via e mail, or a text pager. You will most likely want reports to run overnight but probably do not want to page anyone with an alert until the morning. Therefore alerts can be distributed in the morning after queries are run.

Employee Violations Dashboard (EVD) reports can be generated and distributed through scheduling. EVD reports are generated for each employee/cashier that exceeds one or more alert filters. EVD reports are distributed as PDF attachments via email to users assigned to the run.

Scheduled queries are identified on the query list with a small clock icon next to the query name, indicating that there is at least one scheduled run for that query. A query could potentially have more than one scheduled run assigned to it. For example, some users might prefer a weekly generated report and other users may prefer monthly generated report of the same Adhoc.

LEARNING OBJECTIVES

Upon completion of this section, you should be able to:

- Schedule Adhocs
- Modify a scheduled query
- Delete a scheduled query
- Set Alerts for Adhocs
- Access and review Alerts
- Generating EVD Reports

PROCEDURES

SCHEDULING ADHOC QUERIES

You can schedule Adhocs to run automatically on a regular basis such as weekly, monthly or a specified time period or to run Offline. Users can also be alerted if specific criteria are exceeded in the Adhoc results when the query is run.

How to Schedule Adhoc Queries

1. Select an Adhoc from the Adhocs tab.



2. Click the **Schedule** button. The **Run Maintenance** dialog box is displayed.

The image shows the 'Run Maintenance For CHECK ACTIVITY' dialog box with the 'Define' tab selected. The dialog box contains the following fields and options:

- Run No:** 263
- Process:** 1 (dropdown)
- Active:** ☒
- No available Targets**
- Query:** CHECK ACTIVITY
- Description:** [Empty text box]
- Notes:** [Empty text box]
- Frequency:**
 - ☐ As Soon As Possible
 - ☒ Daily
 - ☐ Weekly
 - ☐ Monthly
 - ☐ Specify Dates
- Run Always:** ☒
 - Start Date:** [Empty text box]
 - End Date:** [Empty text box]
- Top Level Reporting Active:** ☐
- Date Name:** LAST WEEK (dropdown)
- Dynamic Grouping:** NONE (dropdown)
- Buttons:** Save, Cancel, Help

Figure 11-1: Run Maintenance Dialog Box - Define Tab

3. On the **Define** tab:
 - a. Select a Process number, which defines when this query will run. The scheduled times for each process are configured in the scheduling software that runs on the server.

- b. Click the **Active** check box. You can uncheck the Active check box if you have a query that you do not want to automatically run. You can reactivate at a later date.
- c. Type a short description in the **Description** field.
- d. **[OPTIONAL]** Type more detailed notes in the **Notes** text box. For example, explain the purpose of scheduling the query as well as the data it will generate.
- e. Select the **Frequency** of how often the query should run. When you select **Weekly** or **Monthly**, you are prompted to select the day of the week or month the query should run. Selecting **As Soon As Possible** will run the query as soon as the Offline Reporting process is run. This time frame is set up during installation. As Soon as Possible can not be used with Master Filer option on the Distribution tab.
- f. Select **Run Always**, which will run the query indefinitely for the Frequency you selected.
- g. If you only want the query to run automatically for a specific period of time choose **Start** and **End Dates**.
- h. Select the **Date Name** for the time period you want the query to run. For example, if you schedule a query to run weekly, a Date Name of Last Week would be appropriate.
- i. **[OPTIONAL]** - Select a **Dynamic Grouping** if you want to narrow down the results.
- j. **[OPTIONAL]** If you want to receive only X number of rows, activate **Top Level Reporting**. Choose a field from the Top Level Field list box to filter on. This will filter the query and only return the top number of rows (the number you indicate in the Top Level Rows box) based on the field you choose. Indicate the number of rows you want returned in the Top Level Rows box.

4. Select the **Distribution** tab.

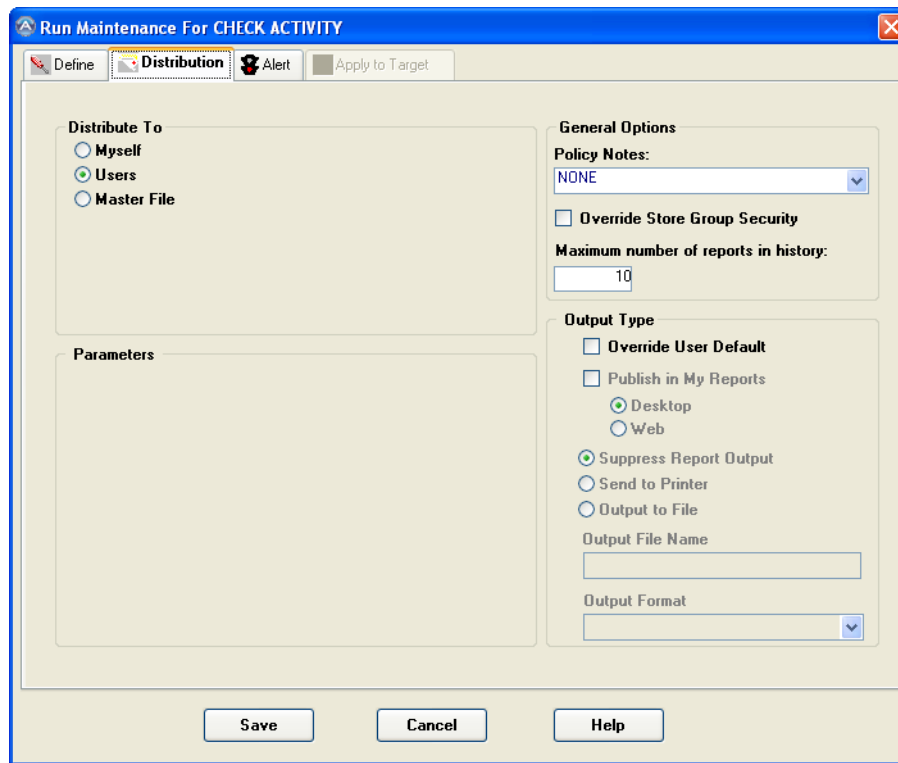


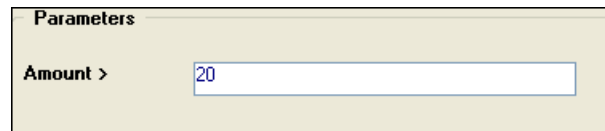
Figure 11-2: Run Maintenance Dialog Box - Distribution Tab

- a. Select who you want to receive the query results.
- 1) Selecting **Myself** will only send the result to you. As an Analyst this is your only option.
 - 2) Selecting **Users** you are able to send specific users the alerts and query results. A System Administrator or Manager has the ability to include multiple users.
 - 3) The **Master File** option is used to generate reports based on master file settings. For example, by using a Store Master, each Store manager could receive a report containing data only for their store. If Store Group Security is being used it does not get applied when using Master File Distribution.



Master File is explained in further detail in the Intermediate class and Webex session.

- b. If you are scheduling a query that has a parameter such as a multi-use report or a "> X" query, enter the value in the **Parameters** area (see right).
- c. **[OPTIONAL]** Select a **Policy Note** to be attached to the report.



- d. Select **Override Store group Security** if you do not want Store Group Security applied when sending out results to users. This option is only available to Administrators and not available when selecting Master File.
- e. The **Output Type** section is where you can specify how the user will receive the query. Generally you will output reports based on each user's own preferences or those specified in a master file. For example, one user may prefer a Analytics report format while another prefers a spreadsheet, another wants it printed, etc. To do this, leave Override User Default unchecked.

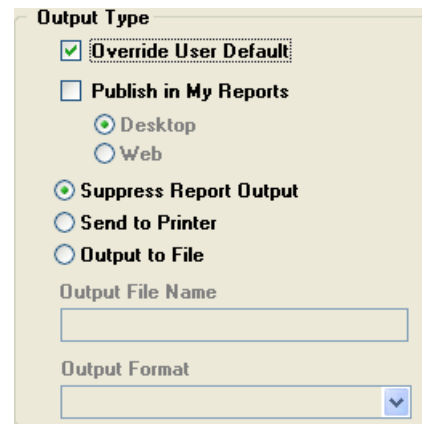
To force the same output for all users, check **Override User Default** then select an output option (see right):

- 1) Select **Publish in My Reports** if you would like the results to display in the **My Reports** window for the users you are distributing to.

Select **Desktop** if the user has the Analytics Desktop application.

Select **Web** if the user has the Analytics Web Application.

- 2) **Suppress Report Output** means that no query output will be generated. Use this if you are running queries to check for alert conditions only and you are not planning to send the query results to any users.
- 3) **Send To Printer** can be used to have the query sent directly to a printer. The printer used will be the default printer for the server that the Query Launcher runs on. If any users need to print reports on their local printer, they should have the query sent to them as a file, which they can then print themselves.
- 4) **Output to File** will write the query out as a file, which can be emailed to a user or copied to a directory. The file can be output in any of the file formats available to Analytics such as text, HTML, spreadsheet, or Analytics report format. Specify an **Output File Name** and select an **Output Format** from the drop down list.



The screenshot shows a dialog box titled "Output Type". It contains several options: "Override User Default" (checked), "Publish in My Reports" (unchecked), "Desktop" (selected under Publish in My Reports), "Web" (unselected), "Suppress Report Output" (selected), "Send to Printer" (unselected), "Output to File" (unselected), "Output File Name" (text field), and "Output Format" (dropdown menu).

5. Click the **Save** button. The Scheduling dialog box is displayed:

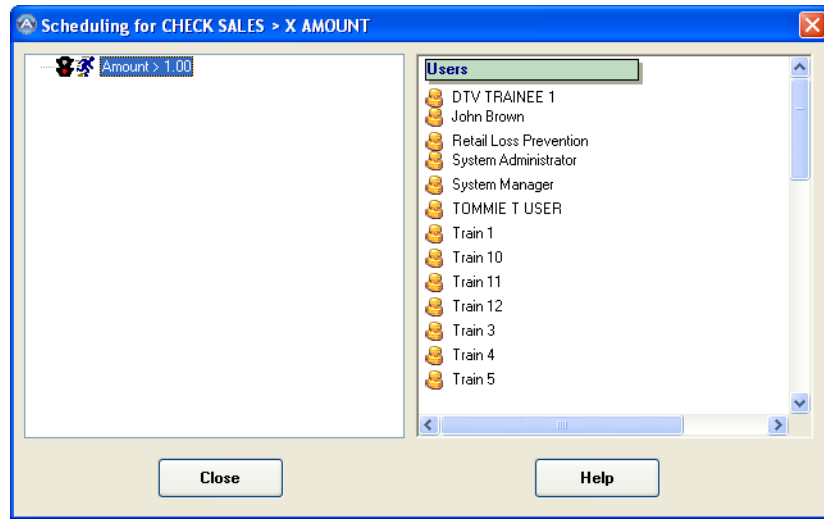


Figure 11-3: Scheduling

System Administrators can assign users to the scheduled query. Click and drag the User ID from the right side to the left side. Drop the User ID **ABOVE** the scheduled query name.

Analyst users can schedule queries for themselves only. They will not have a split window with User IDs on the right side.

6. If you are not going to schedule Alert or EVD reports, click the **Close** button; otherwise, continue with the next section. The scheduled query will appear on the Adhocs tab with a clock icon adjacent to it.

SCHEDULING AND MANAGING ALERT REPORTS

When a query is scheduled to run automatically, users can be alerted if specific criteria outside the normal query criteria is exceeded in the Adhoc results. These alerts can be sent to specific users via email, the Alert window, or both. Alert notification defaults are maintained within their User Profile.



Steps 1 through 6 of [“Scheduling Adhoc Queries” on page 147](#) must be performed before proceeding with this section.

7. **[OPTIONAL]** Click the **Alert** tab. An alert does not need to be set on every query that you schedule.

The screenshot shows the 'Run Maintenance For CHECK ACTIVITY' dialog box with the 'Alert' tab selected. The dialog has three tabs: 'Define', 'Distribution', and 'Alert'. The 'Alert' tab is active, showing a 'Check for Alerts for this Run:' checkbox which is checked. Below this is a 'Create Filter Expression' button and a large text area. A 'Message:' label is followed by another large text area. Under 'Alert Classification', there is a dropdown menu set to 'Not Classified' and an unchecked 'EVD Distribution' checkbox. Under 'Report Display Options', there are two radio buttons: 'Display All Results' (selected) and 'Display Alert Results Only'. At the bottom are 'Save', 'Cancel', and 'Help' buttons.

Figure 11-4: Run Maintenance Dialog Box - Alert Tab

- a. Select **Check For Alerts For This Run** check box.
- b. Click the **Create Filter Expression** button to create criteria for the alert. The Filter dialog box is displayed.

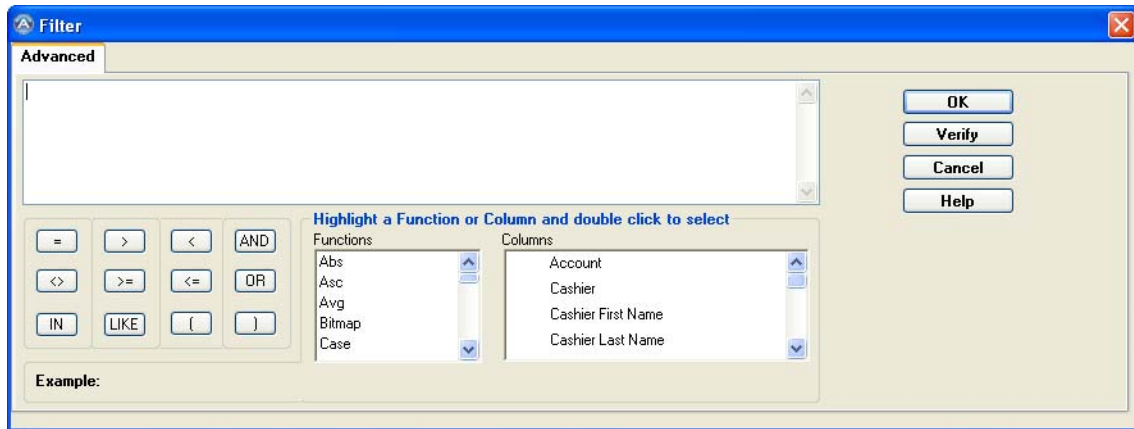


Figure 11-5: Alert Tab - Filter

- 1) Build an expression to check for a specific condition or value that you want to be notified if data is found when the Adhoc runs. If you do not create a filter you will receive an alert whenever the Adhoc report is generated.
- 2) Click **OK** when you are finished creating the filter.
- c. Type a message in the **Message** text box. This message will be sent to users (based on their alert options) any time an alert condition is detected.
- d. Select an **Alert Classification** of where you want the alert to appear on the Alert list in Analytics.
- e. Check **EVD Distribution** if you would like an Employee Violation Dashboard (EVD) report generated for each employee that exceeds the alert threshold. See [“Employee Violations Dashboard Reports” on page 155](#) for more information.
- f. Select one of the **Report Display Options**:

Display All Results - displays all the results of the scheduled query with the alert results highlighted in yellow.

Display Alert Results Only - only displays the results of the alert and not the entire report.

8. Click the **Save** button. The Scheduling dialog box is displayed:

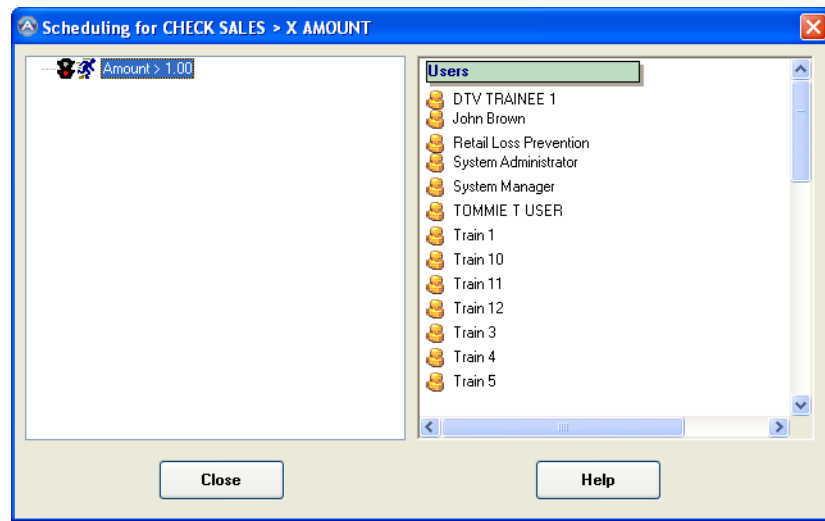


Figure 11-6: Scheduling

System Administrators can assign users to the scheduled query. Click and drag the User ID from the right side to the left side. Drop the User ID **ABOVE** the scheduled query name.

Analyst users can schedule queries for themselves only. They will not have a split window with User IDs on the right side.

9. Click the **Close** button. The scheduled query will appear on the Adhocs tab with a clock icon adjacent to it.

EMPLOYEE VIOLATIONS DASHBOARD REPORTS

The Employee Violations Dashboard (EVD) report is an employee alert report sent from XBR to end-users. These reports are automatically generated in a PDF format when employees exceed specified criteria for activity. These reports are optional for XBR end-users but are considered a beneficial tool in alerting users of any associate who frequently exceeds set thresholds which can be a threat to company profitability and morale. EVD reports can only be generated if an Alert report is enabled on a scheduled Adhoc. The EVD reports can represent one or more risk areas, depending on the build of the originating Adhoc query.

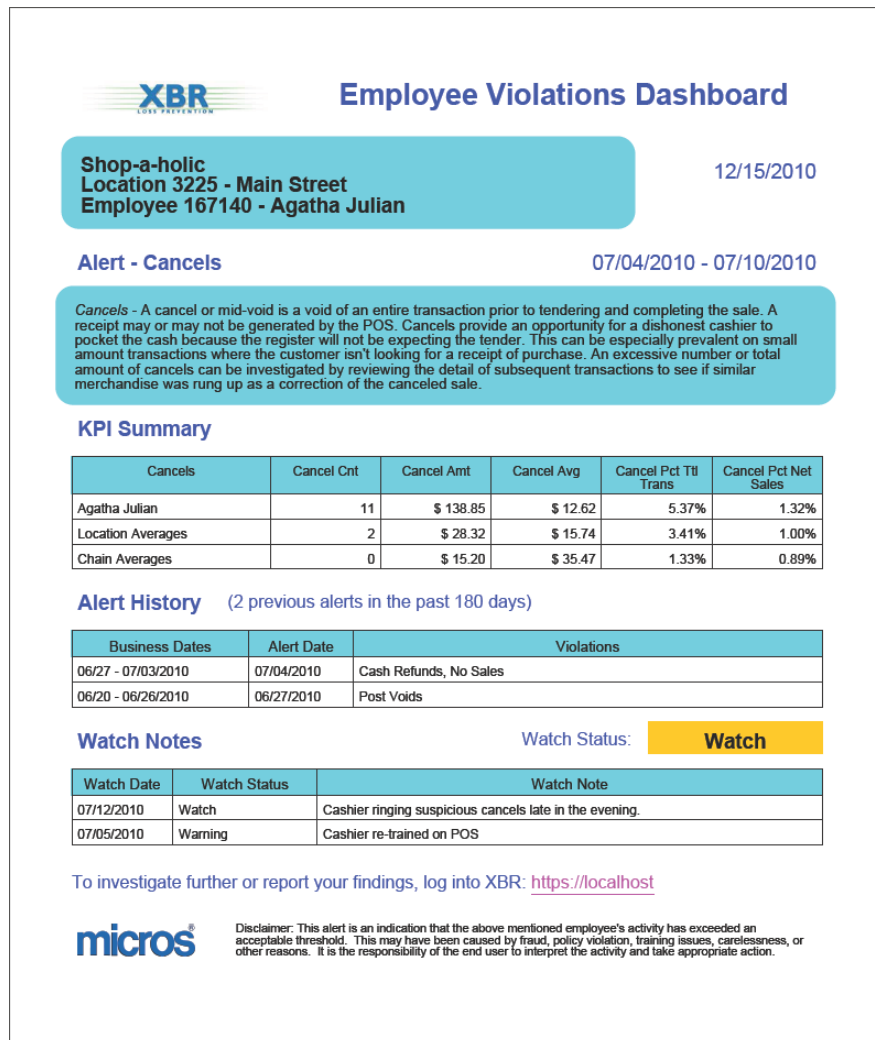


Figure 11-7: Sample Retail/Grocery EVD Report

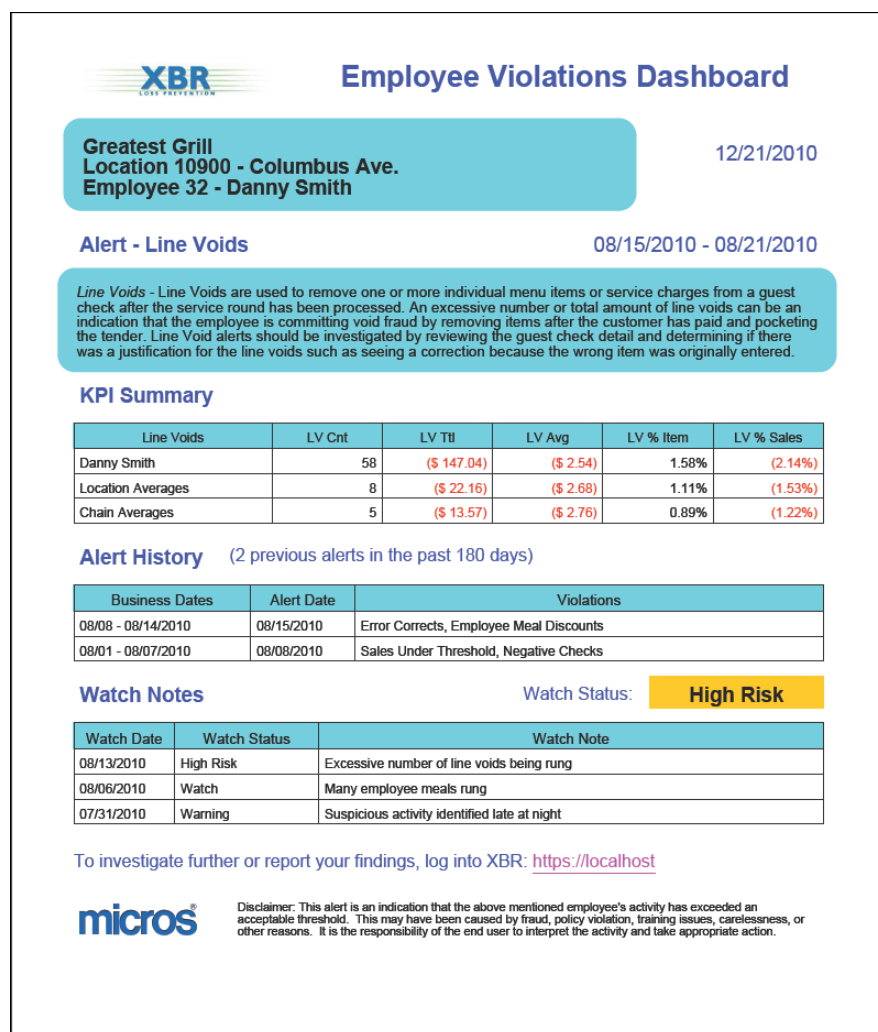


Figure 11-8: Sample Foodservice EVD Report

To generate an EVD report from an Adhoc query, the query must contain summary level data which returns rolled up statistics at the cashier/employee level. Summary level data returns one record per cashier/employee in the results of an Adhoc query. EVD reports can not be generated for specific transactions or any other data level in the database.

There are eight (8) Core EVD Key Performance Indicators (KPI) violations that can be achieved by creating an alert filter using a key metric in one of these areas. The content of the EVD will be based upon the field used in the filter.

The EVD KPIs are:

Retail/Grocery KPIs	Foodservice KPIs
Cash Refunds	Line Voids
Post Voids	Error Corrects
Cash Post Voids	Subtotal Discounts
Cancel	Employee Meal Discounts
Line Voids	Tips Over Threshold
No Sales	Sales Under Threshold
Line Discounts	Zero Amount Checks
Price Overrides	Negative Checks

The EVD report will include statistical totals and averages for the employee, location, and chain. In addition, the report will also include:

- Policy Notes for each of the risk areas listed in the letter
- EVD Alert History for the cashier/employee
- Watch Status and notes for the cashier/employee
- Hyperlink to the XBR Web Application

To generate an EVD report, the user needs to have scheduling rights. The standard scheduling setup is followed, including setting up the Alert expression.

Example 1:

If the Alert expression is set to view any cashiers that exceed ten (10) No Sale Transactions, then the EVD report will also generate, if enabled, a report for each of the cashiers that actually met this filter expression. The Alert filter expression would be:

No Sales >= 10

To view more than one risk area on a given EVD report, the Alert criteria must have multiple filter expressions. This is called a "compound filter". Compound filters require parentheses around each individual filter expression with an "AND" or an "OR" separating them and there must be at least one (1) space before **and** after the math operators. For example:

Good: No Sales Count > 10

Bad: No Sales Count > 10



Compound filters can only be created in XBR Desktop.

Example 2:

If the Alert expression is set to view cashiers that exceed threshold values for multiple risk areas, like both Line Voids and No Sales, then the Alert filter expression would need to be set as follows (ensuring that there are applicable spaces left between the column name, operator, criteria value and OR)

(No Sales >= 10) OR (Line Voids >= 25)

Once the EVD option is enabled, the users that are assigned as recipients of the scheduled Adhoc will receive an EVD report in their email inbox for each cashier exceeding the alert expression(s). The report will be sent as a PDF attachment to the email.

Policy Notes

Policy Notes will automatically be included in the EVD report. The policy name is already configured to the applicable EVD KPI by a Micros-Retail resource. System Administrators and the System Managers can go to the Administration menu within the XBR Desktop to modify the text content of the policy note(s).


Watch Status

If the Watch Status and Notes are updated for a given associate, then this information will automatically populate the EVD report as well. The report will include the date that the associate was added to Watch as well as the applicable status level and any notes.


MODIFY A SCHEDULED QUERY

Scheduled queries can be modified by changing properties such as the frequency or the Adhoc alert criteria, if you set an alert.

How to Modify a Scheduled Query

1. Click the **Queries**  button and select the scheduled query you would like to modify.


Remember that scheduled queries display a clock icon  in the queries list.

2. Click the **Schedule**  button.
3. Double-click the name of the scheduled query to access the Run Maintenance dialog box (or right-click and select **Edit Run Properties**).
4. Make necessary edits.
5. Click the **Save** button.


DELETING A SCHEDULED QUERY

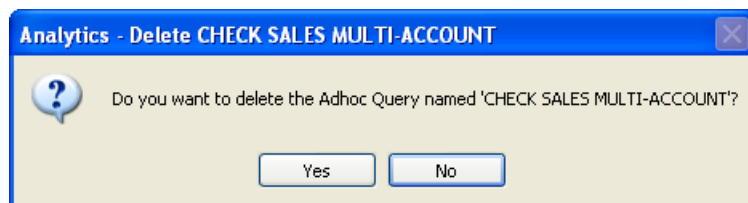
Scheduled queries can be deleted so they no longer automatically run. This also removes any alerts that were associated with that scheduled query.

How to Delete a Scheduled Query

1. Click the **Queries**  button and select the scheduled query you would like to delete.

Remember that scheduled queries display a clock icon  icon in the queries list.

2. Click the **Schedule**  button.
3. Right-click over the name of the scheduled query and select **Delete** from the shortcut menu.
4. Click **Yes** to confirm the deletion of the scheduled query.



Scheduled Report Distribution Preferences

You can customize your user profile to indicate how you want to receive scheduled queries and alerts. The only time you would not receive a query or alert this way is if the user setting up the distribution of the query and the alert overrides the User defaults.

How to Set Your User Report Distribution Preferences

1. Select **Administration -> User Profile** from the menu.
2. If you are a System Administrator, double-click on the user's name.

The screenshot shows the 'Update User Profile' window with the 'Report Distribution' tab active. The 'Name' field contains 'Train 6' and the 'ID' field contains 'TRAIN6'. In the 'Output Type' section, the 'Publish in My Reports' checkbox is checked. Under this, 'Analytics Desktop Client' is selected with a radio button. Other options are 'Suppress Report Output', 'Send to Printer', and 'Output to File'. The 'Output Format' dropdown is set to 'Analytics format'. In the 'Distribution' section, 'Send via E-mail' is selected with a radio button, and the 'Report Directory' dropdown is empty. The 'Alert Setting' section has three checked checkboxes: 'Alert E-mail', 'Alert Attach', and 'Alert Analytics'. Under 'Alert Analytics', 'Analytics Desktop Client' is selected with a radio button. The 'E-mail Address' field contains 'username@company.com'. At the bottom of the window are three buttons: 'Save', 'Cancel', and 'Help'.

Figure 11-9: User Profile - Report Distribution

3. Select the **Report Distribution** tab.
4. In the **Output Type** area, indicate how you want to receive scheduled queries.
 - a. Select **Publish in My Reports** if you would like the results to display in the My Reports window.
 - 1) Select **Analytics Desktop Client** if the user has the Desktop application.
 - 2) Select **Analytics Web Client** if the user has the Web Application.
 - b. **Suppress Report Output** means that no query output will be generated. Use this if you are running queries to check for alert conditions only and you are not planning to send the query results to any users.
 - c. **Send To Printer** can be used to have the query sent directly to a printer. The printer used will be the default printer for the server that the Query Launcher runs

- on. If any users need to print reports on their local printer, they should have the query sent to them as a file, which they can then print themselves.
- d. **Output to File** will write the query out as a file, which can be e-mailed to a user or copied to a directory. The file can be output in any of the file formats available to Analytics such as text, HTML, spreadsheet, or Analytics report format. Specify an Output Format from the drop down list.
5. Set how you want to receive alerts in the Alert Settings area.
 - a. **Alert Email** - Click this option if you want alert messages to be sent via e-mail. The address in the Email Address text box is used for this option. It may be an Email address or a text pager address.
 - b. **Alert Attach** - Click this option if a report should be sent along with an alert warning via e-mail. You wouldn't want to use this option if the alert were being e-mailed to a text pager. This option uses the file format of the Output Format setting. This option does not apply to the Web Application.
 - c. **Alert Analytics** - Click this option if you would like to review alert warnings in Analytics upon logging in.
 6. In the Distribution area indicate if queries should be copied to a directory or sent as an attachment via email
 - a. **Send via E-mail** - If the query will be e-mailed, enter an e-mail address. For multiple addresses, separate entries with a space.
 - b. **Copy to Directory** - If the query will be copied to a directory, use the drop down arrow in the Report Directory area to specify where the file will be placed. The options that appear here are the servers' drive mappings.
 7. Click the **Save** button.

Reading Alert Messages in Email

Similar to sending Adhoc queries as attachments, email can be sent to display alert messages. You can email a group of people, which can be defined in Analytics or using the Analytics Scheduler.

The Adhoc query that caused an alert can be emailed as an attachment. This is defined in the user's profile.

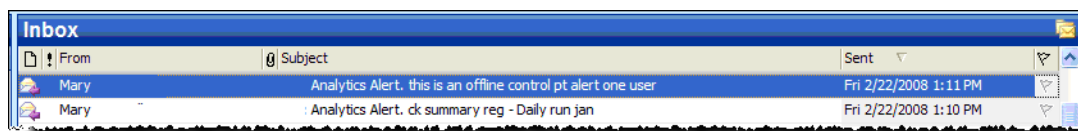
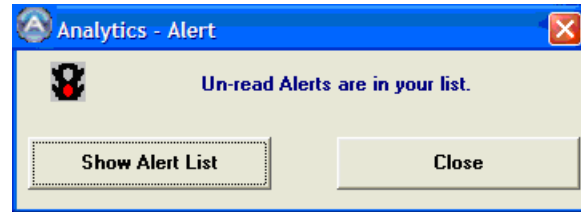



Figure 11-10: Email Alerts

Reading Alert Messages in Analytics

A pop-up box appears upon logging in to Analytics when there are unread Alert messages waiting for you. The Alerts could be generated via Adhoc or Control queries. Use the **Show Alert List** button to review the notifications or click the Close button to review them later.



How to Access and View Alerts

1. Click the Alerts  button on the System toolbar. The lights on this button blink when there are new alerts, which have not been read. The **Alert Notification** list is displayed.

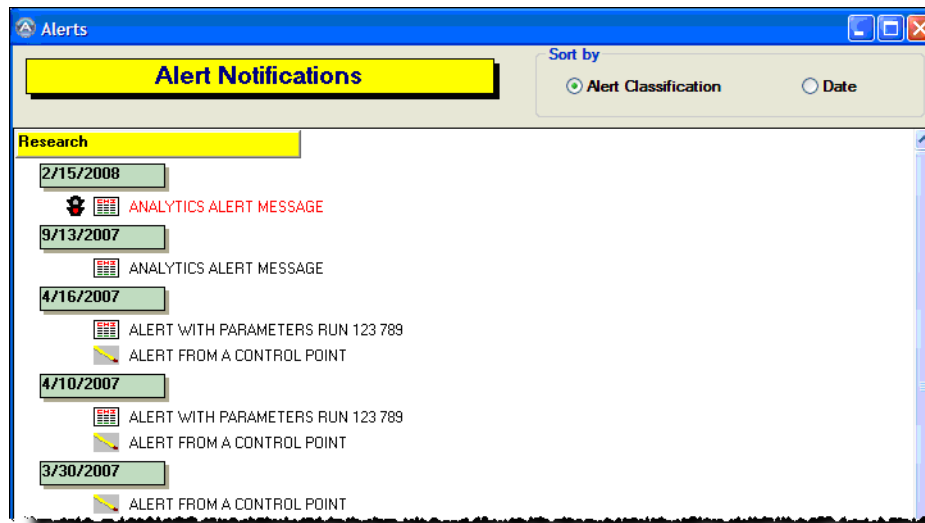


Figure 11-11: Alert Notification List

2. Alert notifications can be sorted by **Alert Classification** or by **Date**.
3. Select an alert message, then click one of the following buttons:

Close - Closes the **Alerts** window.

Delete - Removes the selected alert from the **Alerts** window. Use this after you have read an alert and reviewed the query that generated it.



You can select multiple alerts to delete. Click the alerts while holding down the **[Shift]** key to select contiguous records or the **[Ctrl]** key for non-contiguous records.

Review - Displays the query that generated the alert. Users can also double-click an alert to display the query. For an Adhoc, rows that exceed the Alert threshold are highlighted in yellow. For a Control, the Review screen will appear with the exception set containing the alert highlighted.

Forward - Allows you to send an alert to another Analytics user. When the recipient of the forwarded alert logs into Analytics, they will see the Alert message box.

CHAPTER

12

User Profiles/Roles

OVERVIEW

Analytics has various types of security.

- User
- Library security and User Groups
- Query
- User Store Group Security

This section will discuss each type and the levels within each. A System Administrator can assign users to the type of security they need within Analytics.

LEARNING OBJECTIVES

Upon completion of this section, you should be able to:

- Understand the various types of security
 - User
 - Library and Groups
 - Query
 - User Store Group Security
- Access and maintain user profiles

USER PROFILES/ROLES

A user can be assigned to one of four security levels: System Administrator, System Manager, Analyst, and Read Only. An individual's security level is set up in his/her User Profile. The differences in overall access between the levels are:

System Administrator	System Manager	Analyst	Read Only
Highest level of user access	2nd highest level of user access	Can run any Public or Run-only query, or any query for which he or she is designated as owner	Can run any Public or Run-only queries in libraries to which he or she has access
Can view & maintain profiles for all users	Can view & maintain profiles for all users	Can only view their own user profile	Can only view their own user profile
Can build/modify all query types.	Can build/modify all query types.	Can build/modify public, private and run-only queries for which he or she is designated as owner	Can run Adhoc and Drill Down queries, however they cannot build, modify or delete queries. Can review exceptions
Can view all others queries, including private queries	Can view all others queries, including private queries		
Can access the Scheduler to maintain scheduling options for users and distribution lists	Can access the Scheduler to maintain scheduling options for users and distribution lists	Can schedule reports to run automatically and create alerts that are distributed to them only. They cannot distribute reports or send alerts to other users.	Can look at exception results in the Exception Review; however they cannot change the open/closed status of exceptions. They can update Resolution Notes if given permission and change Watch status for Employee or Store.
Can access any report or management function; Data Dictionary, Purge Exceptions, Event Log, General Defaults, Video Link Mapping and Registry Receipt Maintenance.	Can access any report or management function EXCEPT for Data Dictionary, Purge Exceptions, Event Log, General Defaults, Video Link Mapping and Registry Receipt Maintenance.		
Can create Policy Notes.	Can create Policy Notes.	Can assign Policy notes to queries.	

Function	System Administrator	System Manager	Analyst	Read Only
Run Queries	✓	✓	✓	✓
Build New Queries	✓	✓	✓	
Modify Queries	✓	✓	✓	
System Managers and Analysts can only modify queries that they own or are designated as "public" queries				
Delete Queries	✓	✓	✓	
System Managers and Analysts can only delete queries that they own or are designated as "public" queries				
Maintain User Profile	✓	✓	✓	✓
Review Exception Results	✓	✓	✓	✓
Update Exception Detail Status	✓	✓	✓	
Update Resolution Notes for Exceptions	✓	✓	✓	✓ (If given permission in their User Profile)
Update Watch Status for Employee and Store	✓	✓	✓	✓
Change Exception Status	✓	✓	✓	
Schedule Adhocs and Controls	✓	✓	✓	
System Managers and Analysts can only schedule queries to their own User IDs. System Administrators can schedule to all users				
Access & Maintain Data Dictionary	✓			
Create, Modify, and Delete Libraries	✓	✓		
Create, Modify, and Delete Classifications and Lookup Display Tables	✓	✓		
Set Up Store Group Security	✓	✓		

USER PROFILES

Each user has an ID and password, which allows him/her to log into Analytics. The User Profile window allows users to update their own profile; however, they cannot change any security-related information. Only a System Administrator and System Managers can change security levels, add a new user and delete an existing user in Analytics.

How to Maintain Your User Profile

1. Select the **Administration -> User Profile** from the menu. The User Profile dialog box displays with the **Preferences** tab selected.
2. Double click the applicable User ID.
3. Select a **Language** to be the default language.

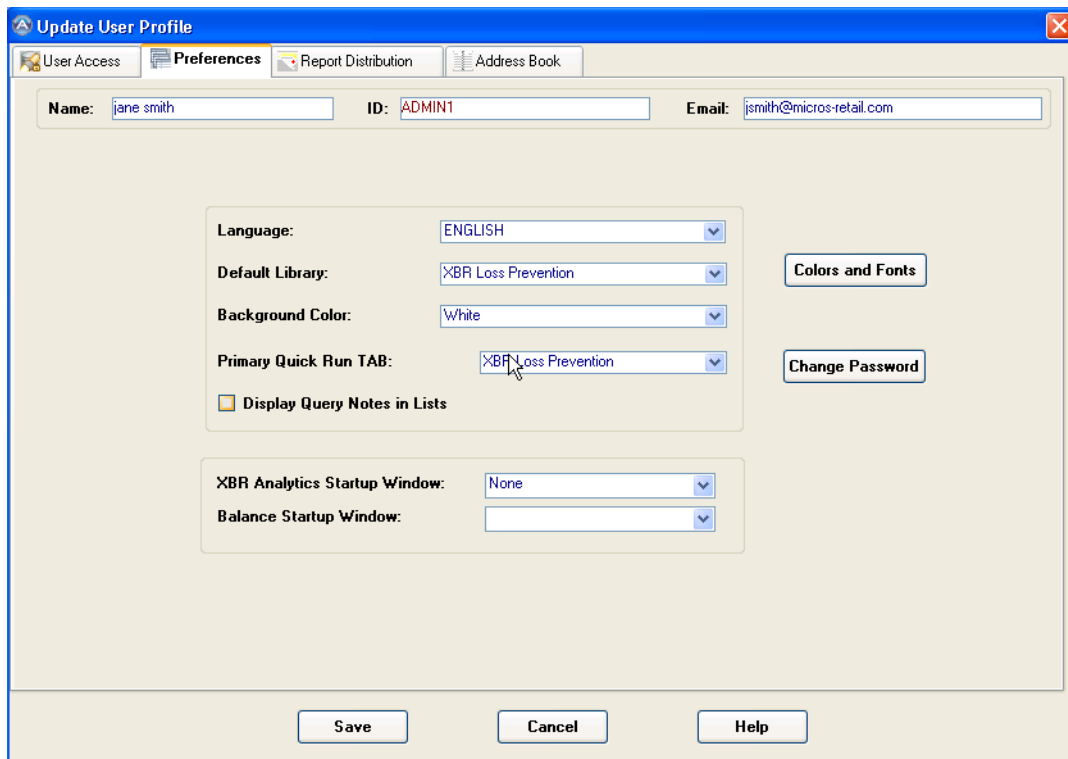


Figure 12-1: Update User Profile - Preferences Tab

4. Select a **Default Library** (i.e. XBR Loss Prevention), which the application will default to when you access Analytics.
5. Select a **Background Color** for the application. You can use the **Colors and Fonts** button to change how the queries display on the screen.
6. Select a **Primary Quick Run Tab**. If you have multiple Quick Run screens you can set which will be the default.

7. Check **Display Query Notes in Lists** to always have the query notes display when you select a query from the list.
8. Select the **Analytics Startup Window**: Quick Run, Alerts, Exception Review, or None to be the default window the application will display after logging in.
9. Select the default **Balance Startup Window** if you also have the Balance application installed.
10. Click the **Change Password** button to change your password. You will be asked to change your password and to confirm your new password.
11. Click the **Report Distribution** tab. This is where you select how you want queries and alerts distributed to you.

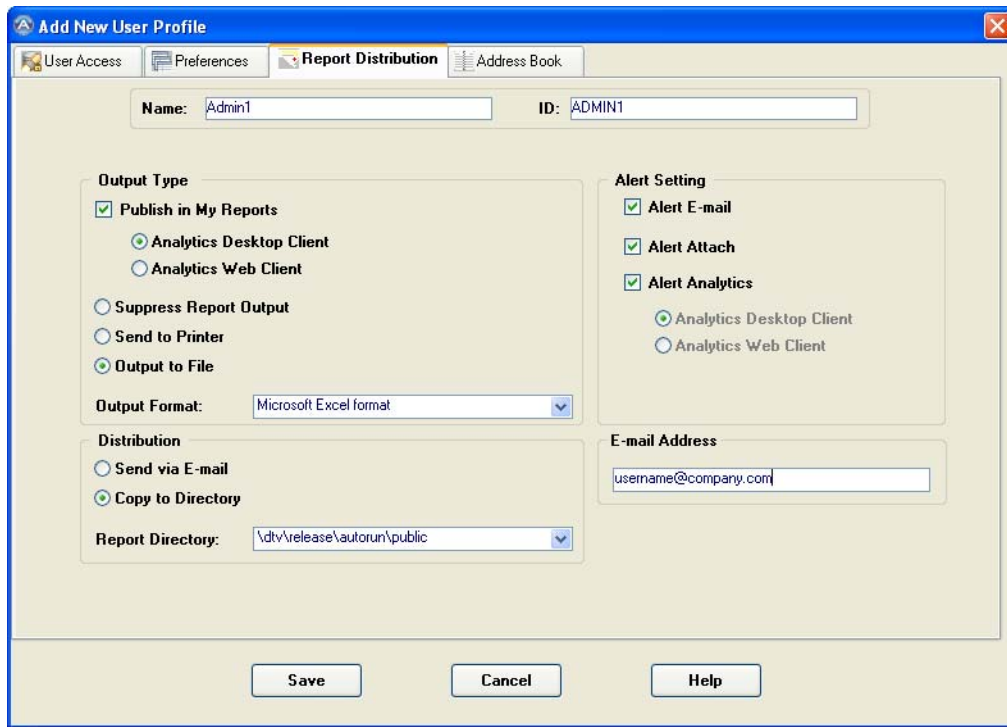


Figure 12-2: User Profile - Report Distribution Tab

12. Select an **Output type** for reports. This is used when the user will receive scheduled reports and sent out automatically.

Select one;

- If Offline reporting is used, select **Publish in My Reports** if you would like the results to display in the My Reports window.
 - Select **Analytics Desktop Client** if the user has the Desktop application.
 - Select **Analytics Web Client** if the user has the Web Application.
- **Suppress Report Output** means that no query output will be generated. Use this if you are running queries to check for alert conditions only and you are not planning to send the query results to any users.
- **Send To Printer** can be used to have the query sent directly to a printer. The printer used will be the default printer for the server that the Query Launcher runs on. If any users need to print reports on their local printer, they should have the query sent to them as a file, which they can then print themselves.
- **Output to File** will write the query out as a file, which can be e-mailed to a user or copied to a directory. The file can be output in any of the file formats available to Analytics such as text, HTML, spreadsheet, or Analytics report format (PSR). Specify an Output Format from the drop down list.

13. Select the **Alert Setting** of how the user will receive alerts.

- **Alert E-mail** - if the user would like alert messages to be sent via e-mail. The address in the E-mail Address text box is used for this option. It may be an E-mail address or a text pager address.
- **Alert Attach** -if a report should be sent along with an alert warning via e-mail. You would not want to use this option if the alert were being e-mailed to a text pager. This option uses the file format of the Output Format setting. This option is not available if the Web Client is selected.
- **Alert Analytics** -if the user would like to review alert warnings in Analytics upon logging in. Notice the Desktop Client or Web Client will get selected automatically according to what was set for the Output Type in step 11.

14. In the **Distribution** area indicate if queries should be copied to a directory or sent as an attachment via email

- **Send via E-mail** - If the query will be e-mailed, enter an e-mail address. For multiple addresses, separate entries with a space.
- **Copy to Directory** - If the query will be copied to a directory, use the drop down arrow in the Report Directory area to specify where the file will be placed. The options that appear here are the servers' drive mappings.

15. Click the **Address Book** tab. You can create mailing lists, so that you can distribute queries and alerts to groups of users. You have the ability to create Public lists, which everyone can access or Private lists that only you can use.

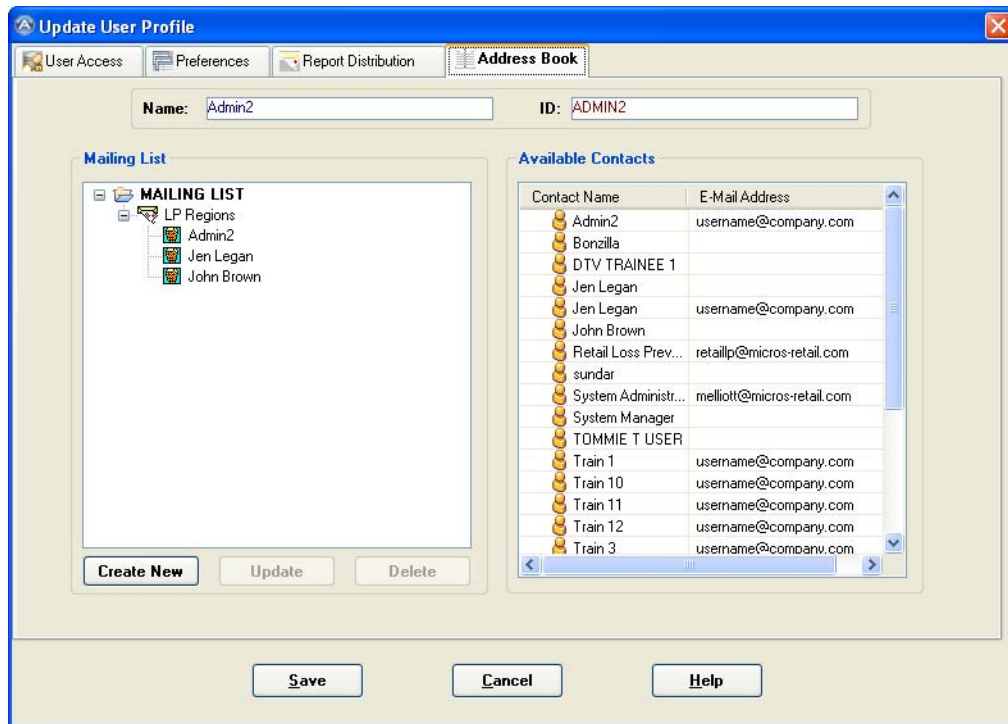


Figure 12-3: User Profile - Address Book Tab

16. Click the **Create New** button to create a new mailing list.

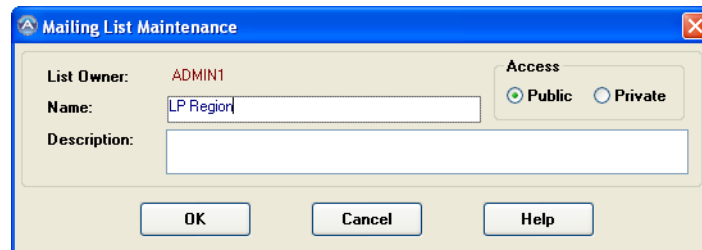


Figure 12-4: New Mailing List

17. Type a **Name** and **Description** for the Mailing list
18. Indicate if it is a **Public** or **Private** mailing list. Public allows every Analytics user to use the list, while only you can use the Private list.
19. Click **OK**.
20. Drag and Drop users you would like on the mailing list from the right side of the screen to the Mailing List name on the left side.
21. Click the **Save** button.

- To remove users from a Mailing List, drag and drop their names from the Mailing List to the list of users on the right.
- To remove an entire Mailing List from the system, select it and then click the **Delete** button.
- Select a Mailing List and then click the **Update** button to modify the description or change the access (i.e. Public or Private).
- If you need to rename a Mailing List, you will need to delete it and then re-create it.
- When scheduling queries or distributing Alerts, drag and drop a Mailing list from the right side of the scheduling screen to the name of the scheduled run on the left.

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