CHAPTER 2: REPORT DEFINITION WINDOW, SORTING, AND RESTRICTING

Training Objectives

Actively participating during this chapter helps you learn:

- The features available in the Report Definition window and how they are used to modify and create reports
- How to change sorts and create or modify user defined sorting criteria
- How to create and modify user defined restrictions for a report
- How to use constants, functions, and operators in restriction expressions

Introduction

This chapter focuses on the Report Definition window. Clicking the **New** or **Open** button in the Report Writer window opens the Report Definition window.

The Report Definition window is used to:

- Name a report
- Assign a report to a series
- Create or change sorting and restricting options
- Make selections that affect how the report is created and printed

Sorts are pre-defined for tables, and most times, tables have multiple pre-defined sorts in Microsoft Dynamics™ GP commonly referred to as keys. The **Using Key** field on the Report Definition window allows you to change the sort of a table by simply selecting a different key. The **Sort** button allows you to create user-defined sorts which give great flexibility to users that want to sort data in a certain way on Microsoft Dynamics GP reports.

A restriction is used to limit the amount of data that appears on a report. The **Max Records** field on the Report Definition window can be used to restrict the number of records that appear on a report. Click the **Restrictions** button to create a restriction expression using table fields, constants, operands, and functions.

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Report Definition Window

Before working with the layout of a report, open an existing report definition or create a new one. The Report Definition window is used to specify important characteristics of the report, such as its name. Many of these report characteristics can be adjusted while designing the report layout.

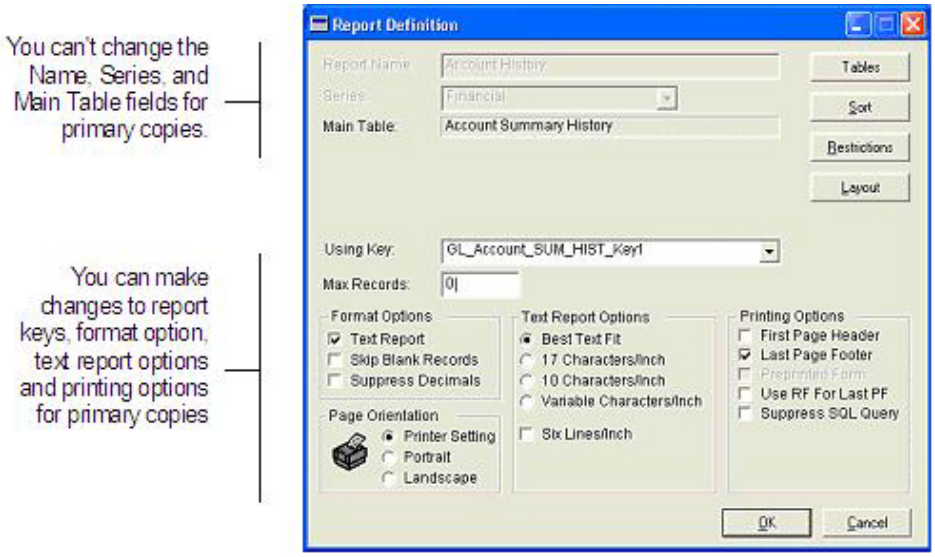
If a primary copy of a report is created in the Report Writer window, the only changes you can make to the information displayed is to the following:

- Printing options
- Format options
- Text report options
- Key

If a secondary copy of a report is created, any of the information displayed can be changed. If modifying a secondary copy, the name entered when clicking the **Copy** button appears as the default, but a new name can be entered in the **Name** field. Remember that you may be creating many reports, so be sure the name adequately describes not only the report, but also the way it is sorted or restricted.

The following illustrations show the different modifications that can be made to a primary copy and a secondary copy of a report.

Primary Copy



Notice that for a primary copy, the **Report Name**, **Series**, and **Main Table** fields cannot be changed. On the secondary copy, these fields are available to be changed if necessary.

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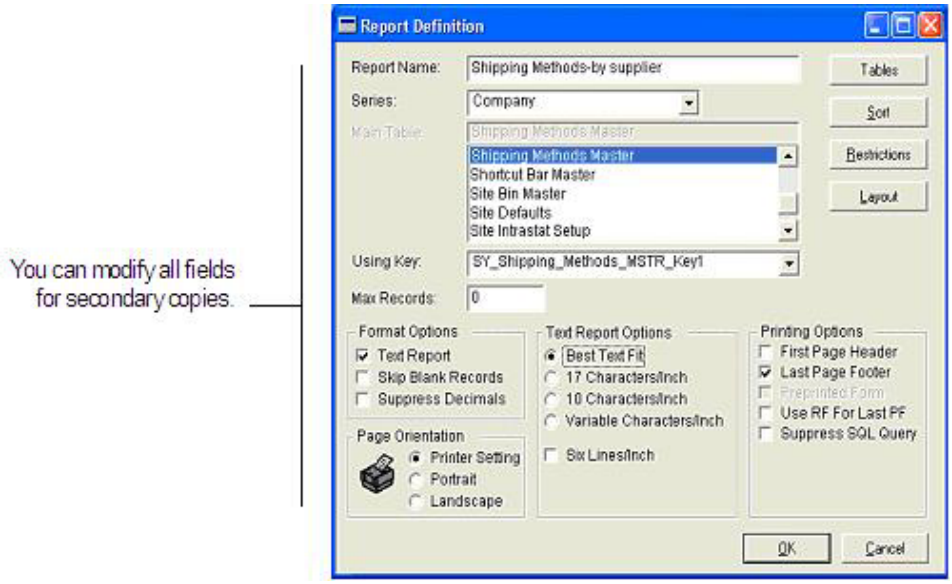
Secondary Copy



Report Name

This is used to identify the report. To create a new report, first enter the report name in the **Report Name** field. Remember that you may be creating many custom reports, so be sure the name is adequately descriptive of not only the report, but also the way it is sorted or restricted. You can change the name of a report at a later time if desired.

Series

Select the report series this report is associated with. This determines which series you select in the Custom Reports window when printing the report from the Microsoft Dynamics GP system. The report also appears in the selected series when creating report groups. It is recommended that you select the same series for the report that the main table belongs to. For information on a table's series, refer to the online table descriptions.

Main Table

Specify which table is the report's main table. (You should already have used the online table descriptions to determine which table or tables are used to create the report.) If using more than one table to create the report, select the one containing the most information or the most general information, or the one that you link other tables to in a way that enables data in the report to be printed accurately.

HINT: *The main table key determines how the report is sorted in the absence of a sorting method, but it is not the only table to draw information from for the report. Typically, you can link additional tables to the main table.*

Using Key

The first key of the main table appears as the default in the **Using Key** field, once a table is selected. A key is a predetermined field or group of fields used to sort the data on a report. A key is often referred to as a pre-defined sort. The report is sorted by the selected key unless another sorting method is specified. Select another key from the list if desired. Typically, sorting by a key is faster than conducting user-defined sorts created by using the **Sort** button. User-defined sorts are discussed later in this chapter.

Follow these steps to view the fields that compose a key:

1. Click the **Tables** button on the tool bar and highlight the appropriate table in the table list.
2. Click the **Open** button.
3. In the Table Definition window, select the table key you want to view and click the **Open** button.

   The fields listed in the Key Segments list on the right are the fields by which the report is sorted, in the order they are listed.

Max Records

To run a test on this report, set the number of records that you want included on the report. If creating a report that includes a large amount of data, first run a test of the report with a minimal number of records. After formatting the report, remove the maximum number of records so the report includes all of the data.

For example, if you enter the number 10 in the **Max Records** field only the first 10 records of the report are printed. This allows you to create a Top-10 report or Top-? without the need to define a restriction. The highest number available in the **Max Records** field is 32,767.

Format Options

Text Report allows you to print the report very quickly, but without any graphics, color or fonts other than the printer's default font. If you do not select **Text Report**, the report is a graphics report and drawing options and picture resources can be used on the report.

Skip Blank Records allows you to prevent records from being printed if a field in the record, or one that is related to the record, is blank. For example, this selection can be used with a report containing information from the Account Master table as the main table, and the Year-to-Date Transaction Open table as a linked table, with the **Account Number** field linking them.

If **Skip Blank Records** is selected, accounts that there is no data in the Year-to-Date Transaction Open table are not printed. If you do not select **Skip Blank Records**, every account is printed, whether or not there is corresponding information about it in the Year-to-Date Transaction Open table.

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Suppress Decimals allows the suppression the decimal and decimal digits for all of the currency fields on the report. If **Suppress Decimals** is selected on the report, the values of the currency fields are automatically rounded.

Text Report Options

If **Text Report** is selected, determine which of the following text report options are applied to the report.

Best Text Fit – Microsoft Dynamics GP determines if the report is printed using compressed or uncompressed text, using the one that allows all information to be printed on the report.

17 Characters/Inch – The report is printed in compressed text, regardless of whether it is necessary in order to fit the report on the paper, according to the page setup and printer selections you have made.

10 Characters/Inch – The report is printed in a standard uncompressed font, even if the report is too wide for the paper.

Variable Characters/Inch – Allows multiple font sizes used within one text report. A different font can be used on each line of the report. However, if an object is moved onto a line with an existing field, the font for the new object automatically changes to the font of the field that was already located on that line. The font options available include: 5 characters/inch, 6 characters/inch, 10 characters/inch, 12 characters/inch and 17 characters/inch. A font can be selected as a default option, or it can be selected for each object after it has been placed in the layout of a report.

HINT: *If using more than one font on a text report, the 6 Lines Per Inch check box should also be selected.*

Six Lines/Inch – Six lines of the report should be printed in each inch of a text report. The selection also prevents fonts from becoming too small when printed in compressed text.

The font shrinks in width so that the entire report is printed on the available paper, but it does not shrink in height so that more than six lines of text are printed in an inch.

Printing Options

Select or clear the printing options as described as follows.

First Page Header and **Last Page Footer:** Specify whether these two sections appear on the first or last page of the report. If you do not select these check boxes, the PH (Page Header) and PF (Page Footer) sections do not print on the first or last page of the report, even if they are included in the Report Layout window.

Preprinted Form: Remove the built-in margin from the layout, allowing fields to print as close to the edge of the form as your printer permits.

HINT: *If you create a text report that has the Variable Characters/Inch and Preprinted Form options, the section markers for the report appear in red if the size of their corresponding section is not an increment of 12 pixels. This is an indicator that the section should be resized for it to print correctly. The section can be resized by clicking and dragging on the section marker until it no longer appears red in color.*

When placing fields in the report layout without selecting Preprinted Form, a field placed against the left edge of the layout area is printed a half-inch (or the built-in margin your printer uses) from the left edge of the paper.

When Preprinted Form is selected, items are printed on paper exactly where they are placed in the layout. Select Preprinted Form to select the Reset Report selection in the Header/Footer Options window.

HINT: *If you create a text report that has the Variable Characters/Inch and Preprinted Form options selected as part of its report definition, the margins for the report can be set by clicking and dragging on the vertical dotted line that appears at the left side of the Layout window for that report.*

Use RF for last PF: Replace the last page footer on a report with the report footer. The report footer is printed in the area designated for the page footer. Also select the **Last Page Footer** check box when using this option. If the report contains information about totals that appear in report footers, select this option.

For instance, an invoice report containing invoice numbers, invoice items, and an additional footer could have a **Sum type** field in the additional footer (which breaks on the invoice number field) to display the total sum of the invoice items.

To display that sum at the bottom of the report, place it in the report footer. Then select **Use RF For Last PF**, as well as the **Reset Report** and **Suppress Last Record's Footer** selections in the Header/Footer Options window for the additional footer.

Suppress SQL Query: Prevents the Report Writer from generating a SQL query when it gathers data for the report. In rare cases, the Report Writer may not be able to generate a valid query for a complex report. Selecting this can reduce the report's performance, but may be necessary for the report to print properly.

Page Orientation

Save the page orientation to the report definition by selecting **Portrait** or **Landscape**. Select **Portrait** to have the report printed in portrait mode, regardless of the current printer setting. Select **Landscape** if you prefer to print the report in landscape mode. If you select Printer Setting, Report Writer uses the printer settings in Microsoft® Windows® to determine the orientation to use.

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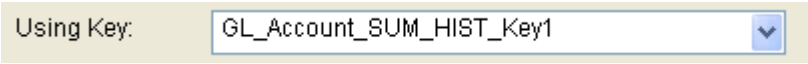
Sorting Reports

Report Writer enables sorting reports by any of the fields in the tables used on the report, allowing you to specify the order that information is presented. Select to sort by one field or a combination of fields.

For example, a report listing your companies and the users who have access to each could be sorted by company name, then by user. The report would be printed listing each company in alphabetical order, and the list of users with access to each company would be listed in alphabetical order as well.

There are two methods used when sorting reports: the **Using Key** field in the Report Definition window and the **Sort** button in the Report Definition window.

The Using Key Field



If you do not create a user-defined sorting option using the **Sort** button in the Report Definition window, by default the report is sorted by the key segments that make up the key specified in the **Using Key** field in the Report Definition window.

A key is a predefined field or group of fields used for sorting purposes. A major benefit of the **Using Key** field to sort a report is speed; because the keys have already been created, the report does not need to be sorted when it is printed.

View the fields that make up a key using the **Tables** button on the toolbar. In the Tables window, select the report's main table. In the Table Definition window, select the key being used for this report from the Keys list and click **Open**. The Key Definition window opens, displaying the fields that make up the key in the Key Segments list. (This information is also available in the online field descriptions.)

If the key contains a composite field, such as the **Account Number** field, which is made up of account segments, the components of the field may be shown instead of the composite field itself. The report is sorted in the order the fields listed in the Key Segments list are displayed. Click **OK** to close the Key Definition window and return to the Table Definition window. Click **OK** to close the Table Definition window; then close the Tables window.

Use the Table Definition window to view all the keys associated with a table. Select the key you want to use to sort the report from the Using Key drop-down list in the Report Definition window.

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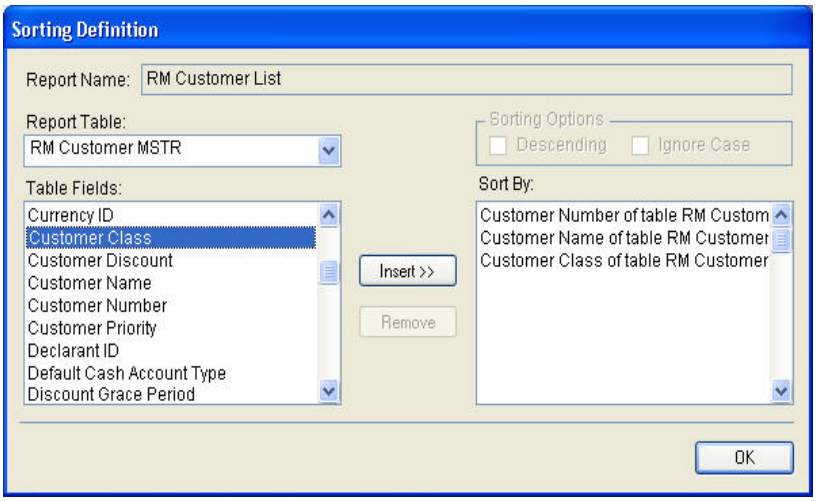
The Sort Button

If you cannot sort the report the way you want using one of the main table's keys, create a user-defined sorting option by clicking the **Sort** button in the Report Definition window.



One of the major benefits of creating user-defined sorts is flexibility. With a user-defined sort, you can sort a report by any field in any of the tables linked into the report. However, because the sort is not attached to a Microsoft Dynamics GP table, it takes longer to print a report that uses a user-defined sorting option since the sort is created at the time the report is printed. Use the steps listed in the following sections to create a user-defined sorting option for a report.

Opening the Sorting Definition Window

Select **Sort** in the Report Definition window to display the Sorting Definition window.

Selecting Fields to Sort Report By

From the Report Table list, select the table containing the field to sort by. The Table fields list displays all the fields available in the table currently selected in the Report Table list. Highlight the name of each field to sort the report by, and select **Insert** to place it in the Sort By list.

Sort the report by any field in any of the report tables; the field does not need to appear on the report.

HINT: *Each field is displayed in reverse order of selection. For example, if you insert three fields in the Sort By list, the first field inserted is displayed third in the list and is the third field that the report is sorted by. If you want to insert a field in a specific order in the list, highlight the field above the position where you want to place the field, and then insert the appropriate field. It appears below the highlighted field in the Sort By list.*

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Selecting Sorting Options

For each field in the Sort By list, determine whether to have the data sorted in ascending or descending order, and whether to ignore case.

Descending – Allows you to specify, for each field, whether the report is sorted in descending or ascending order. To sort a list of companies in alphabetical order, for example, sort the report by company name and clear **Descending** for that field. To view a list of accounts from the one with the highest balance to the one with the lowest, sort the report by account balance and select **Descending**.

Ignore Case – Allows you to specify, for each field, whether case is considered when the report is sorted. If you select **Ignore Case**, the report is sorted only according to the value of the fields. If you clear the selection, all items with uppercase letters appear before those with the same lowercase letters. The report is printed faster if **Ignore Case** is cleared.

The following illustration shows how each selection would affect a list of names.

Select Ignore Case	Unmark Ignore Case
adams	Beaulieu
Beaulieu	Franks
Franks	Johnson
douglas	Jones
Johnson	Serrota
Jones	adams
Serrota	douglas

Saving a Sorting Method

Click **OK** to close the Sorting Definition window. Be sure to save changes when closing the Report Definition window, or the sorting method created will not be saved.

HINTS: *If you are using additional headers and footers on your report, create or select any sorting options before creating the additional sections. The fields available for additional headers and footers to break on in the Header/Footer Options windows are drawn from the* ***Using Key*** *field or the user-defined sort. If changing a user-defined sort or the key used by the report, you can inadvertently delete a field on which an additional section breaks and cause problems with how the report is sorted.*

You can sort any modified or custom report using Report Writer; however, any sorting method you create for a primary copy is automatically overwritten if you sort it a different way in the Microsoft Dynamics GP system using a report option selection. Secondary and custom reports can be sorted only by using Report Writer. If you need to print the same report sorted by several different methods on a regular basis, create several copies of the report and create a different sorting method for each.

Restricting Reports

This section describes the process of restricting the data that prints on a report. Restrictions specify the amount of information on a report so that only the information needed is shown.

For example, you might have an account list that displays accounts and their balances. However, to look only at information for accounts with a balance greater than $10,000, you do not want to search through the entire account list for those with the largest balances. You can use restrictions to limit the data that appears on a report.

There are two methods to use when restricting reports:

- **Max Records** field
- **Restrictions** button

The Max Records Field

Enter the maximum number of records you want to appear on the report using the **Max Records** field. It displays 0 as the default, indicating that there is no limit to the number of records printed on the report.

If you are printing your list of accounts, for example, and want only the 10 accounts with the largest balances to print, enter 10. Next, sort the report by account balance in descending order.

This restriction option can be very helpful if you commonly want reports restricted to your Top-20 customers, or Top-50 vendors. The highest number allowed in the **Max Records** field is 32,767.

HINT: *If you do not create a sorting method, the records are counted according to the main table's key in ascending order. For example, if you select the Customer Master Table as the main table and key 1 as the key, the report is sorted by Customer Number, from the lowest number to the highest.*

To run a test report, set the number of records you want included on the report. If creating a report that includes a large amount of data, first run a test of the report with a minimal number of records. This can save time since the complete report does not have to printed as you verify formatting and modifications that you make to a report.

Once you have the report formatted the desired way, remove the maximum number of records so the report includes all of the data.

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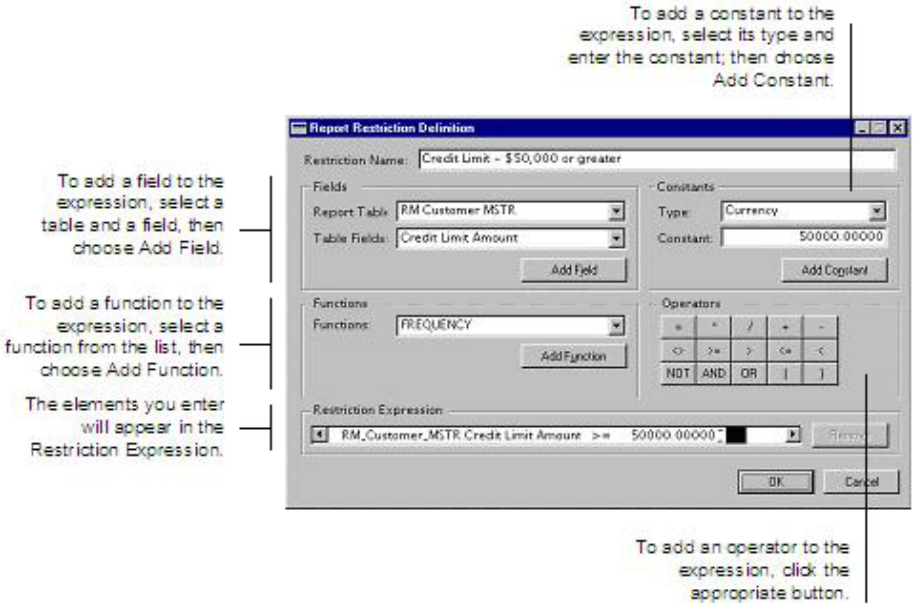
The Restrictions Button

Restrict the contents of a report by creating a user-defined restriction. Create a user-defined restriction by clicking the **Restrictions** button in the Report Definition window to open the Report Restrictions window. The current restrictions on the report are listed in the window.



Select **New** to create a new restriction, or highlight the restriction you want to modify and click **Open**. The Report Restriction Definition window opens.

Writing a Restriction

The elements of the expression you enter appear in the **Restriction Expression** field. Examples of restrictions are listed in the following table.

Goal	Restriction expression
Print a list of all accounts with balances of greater than $10,000	Account Balance > $10,000
Print a list of accounts whose first segment lies between 100 and 500	100 <= Account Segment 1 <= 500

Before entering the restriction expression, write it out completely and decide which of the fields, operators such as plus and minus signs, constants and functions you will use to express the restriction.

HINT: *You cannot make entries directly in the* ***Restriction Expression*** *field; all entries must be made by selecting the appropriate item, such as a field or a plus or minus sign, then using the appropriate button to enter it in the* ***Restriction Expression*** *field.*

Elements of Expressions

Fields

The Report Table list allows you to select any table that is linked to the report. After selecting a table, use the Table fields list to select the field you want to include in the restriction. Click **Add Field** to add the field to the Restriction Expression. If you need to use a field in the expression that is not displayed in any of the lists, use the online field descriptions to find the table it is stored in. Then use Report Writer's linking capability to link the table to the report, if possible.

Constants

Constants are items such as text or numbers that you define. The Type list allows you to select one of the following constant types: integer, string, currency, date or time. These constant types are storage types, five of the basic field types used to store information in Microsoft Dynamics GP.

Constant type	Used for:	Example
Integer	Numbers without decimal places	Any number that is not a monetary value, such as the number of line items on an invoice.
Currency	Numbers with decimal places	Any monetary value, such as an account balance.
String	Text	Passwords, names, phone numbers.
Date	Dates	The date a user logged into Microsoft Dynamics GP.
Time	Times	The time a user logged into Microsoft Dynamics GP.

After the type is selected, use the **Constant** field to enter the constant. Click **Add Constant** to add the constant to the Restriction Expression.

Functions

Restriction functions are predetermined operations included with Report Writer. To add a function to the Restriction Expression, select the function from the Functions list and click **Add Function**.

Most of the functions perform a calculation on a specified expression. For example, the AVERAGE function prints the average value of the expression that the function is applied to. In addition, some of the functions can be used to change the format of a field. The UCASE function, for example, prints text fields in all uppercase characters, regardless of how they were typed when entered.

Other functions such as CUR_STR can be used to convert a field's storage type, giving greater flexibility in writing expressions. Depending upon the product being used with Report Writer, there may be user-defined functions provided with that product. Refer to the product's documentation for more information about those functions.

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Dates

Fields and constants with Date control types can be used in only two ways in restriction expressions: adding a date and a number which describes a specified number of days and subtracting one date from another. The following examples illustrate each type of expression and a sample expression using each method.

Adding a Date and an Integer

Expression: `Date + Integer` (can be constant or field value)
Result: `Date`
Example: 12/01/07 + 5
Example result: `12/06/07`

You can also create two expressions of this type and use comparison operators such as Greater Than or Less Than to compare them.

Subtracting a Date from a Date

Expression: `Date - Date` (can be constant or field value)
Result: Integer
Example: 12/06/07 - 12/01/07
Example result: 5 (days)

The result type must be an Integer. You can also create an expression of this type and use comparison operators such as Greater Than or Less Than to compare it to a field or constant with an integer control type.

HINT: *The time necessary to generate a report can be reduced by following a few rules when writing expressions. For example, "`Balance >= 10000`" and "`NOT (Balance < 10000)`" mean the same thing. However, the second expression takes longer to calculate.*

Operators

The operator buttons join the other elements of the expression together. To add an operator to the Restriction Expression, select the appropriate symbol. You can reduce the time required to generate reports by the way expressions are written. Some types of expressions take longer to evaluate (and the reports take more time to generate) than others. For example, "Balance >= 10000" and "NOT (Balance < 10000)" mean the same thing. However, the second expression takes longer to calculate.

Removing and Inserting Items in Expressions

To remove an item from the expression, highlight it and click **Remove**. To add an item to the beginning or middle of an expression, click the appropriate location in the expression and add the item using the techniques described earlier.

Saving a Restriction

Click **OK** when you have completed the restriction. Create additional restrictions for the report by clicking **New**. To modify a restriction, highlight it and click **Open**. The number of restrictions placed on a report is limited only by the amount of RAM available when printing reports.

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Lab 2.1 – Sorting

Company: Fabrikam, Inc.

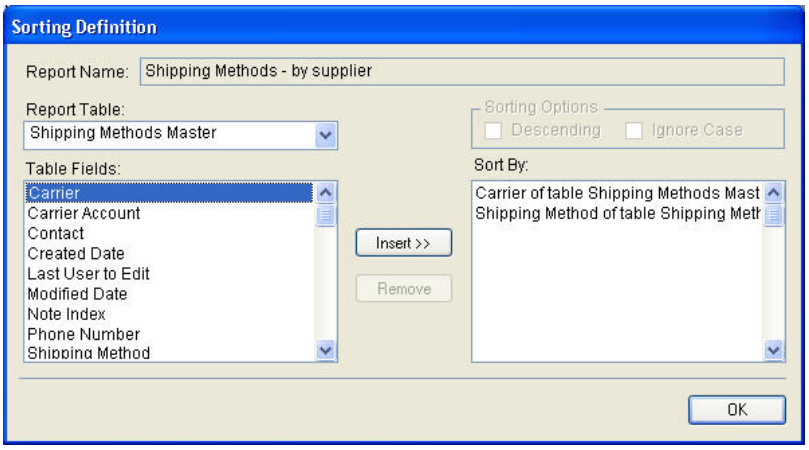
Scenario: Your company has decided that the Shipping Methods Report would be more useful if it were sorted by company name. As a result, you have been requested to make the change.

Challenge Yourself!

1. Create a secondary copy of the Shipping Methods Report from the Original Reports list. Name the report Shipping Methods-by supplier.
2. Sort the report by Carrier and Shipping Method. Ensure you are sorting in descending order and that Case is not taken into consideration.

   The sorting method you create prints the information on the report in order of carrier. If a carrier provides more than one shipping method, then the methods it provides appear in alphabetical order.

   When you have finished creating the sorting method, the Sort Segment window should look like the following illustration.



3. Print the report from the Modified Reports list, ensuring that the report only prints to the screen.

   Notice the report is now printed in order of carrier, and if the records have the same carrier, they are sorted by shipping method.

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Lab 2.1 – Sorting

Company: Fabrikam, Inc.

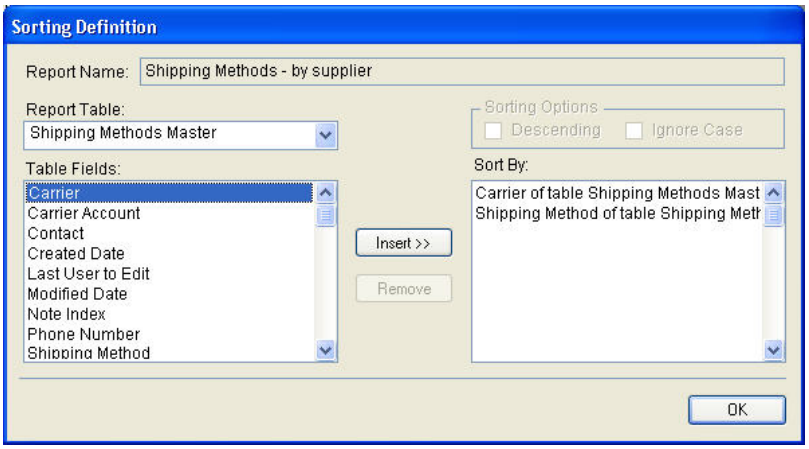
Scenario: Your company has decided that the Shipping Methods Report would be more useful if it were sorted by company name. As a result, you have been requested to make the change.

Need a Little Help?

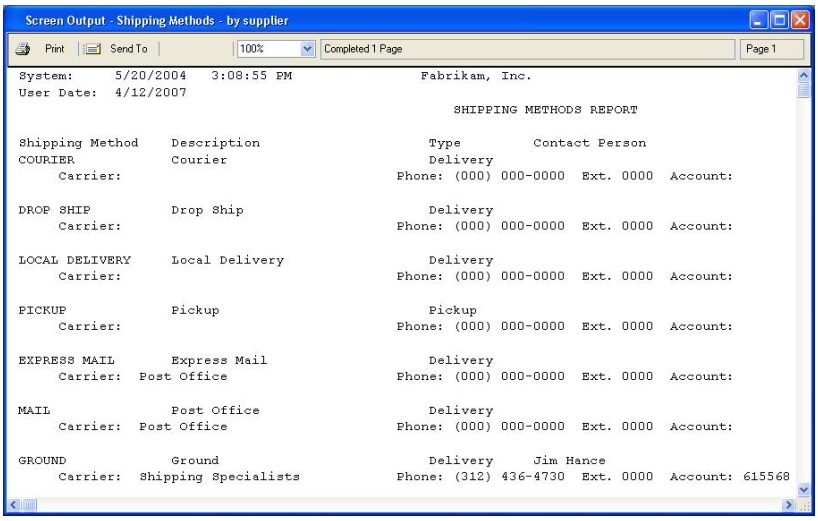
1. Launch Report Writer from the **Customize** option on the **Tools** menu.
2. From the Original Reports list, highlight the Shipping Methods Report and select **Copy**. Name the report Shipping Methods-by supplier.
3. Open the report.
4. Open the Sorting Definition window.
5. Insert the following fields from the Shipping Methods Master table into the Sort By list. Note that the first field you insert actually becomes the second field that the report is sorted by.

First Field	Shipping Method
Second Field	Carrier

The sorting method you create prints the information on the report in order of carrier. If a carrier provides more than one shipping method, then the methods it provides appears in alphabetical order. When you have finished creating the sorting method, the Sort Segment window should look like the following illustration.



6. Highlight each field in the Sort By list, and select the Ignore Case option. Leave the Descending selection clear.
7. Close the window and save the sorting method.
8. Click **OK** in the Report Definition window.
9. Print the report from the Modified Reports list, ensuring that the report only prints to the screen.



The report appears in the Screen Output window similar to the above illustration. Notice the report is now printed in order of carrier, and if the records have the same carrier, they are sorted by shipping method.

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Lab 2.2 – Restricting

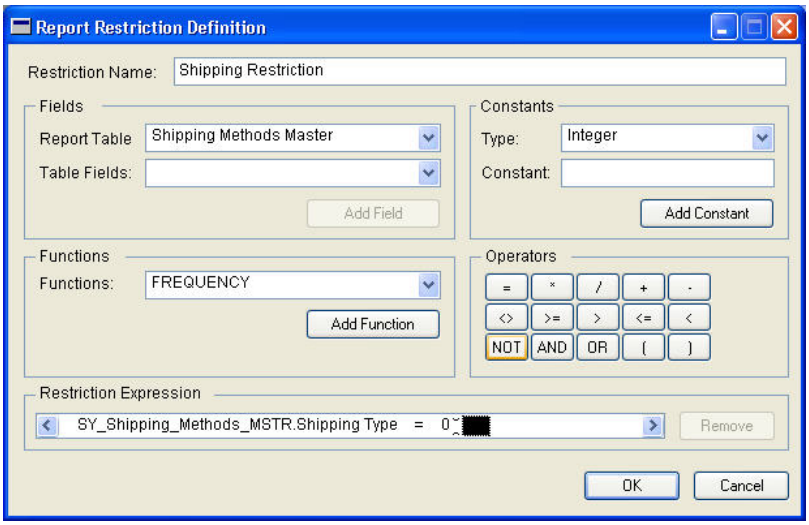
Company: Fabrikam, Inc.

Scenario: The Accounts Payable department would like a list of all the Shipping Methods they should be using when adding new Vendors or Vendor Classes. Make a copy of the Shipping Methods Report, and place a restriction on it to print only shipping methods that have shipping types set to pickup.

Challenge Yourself!

1. Create a Copy of the Shipping Methods Report from the Original Reports list. Enter Shipping Methods-Pickup Carriers as the name.
2. Create a restriction expression that limits the report to records where the shipping type is Pickup.

   Once you have written the expression, the window should look like the following illustration.



3. Print the report from the Modified Reports list, ensuring that the report only prints to the screen.
4. Only records that have shipping types set to pickup should appear on the report.

Lab 2.2 – Restricting

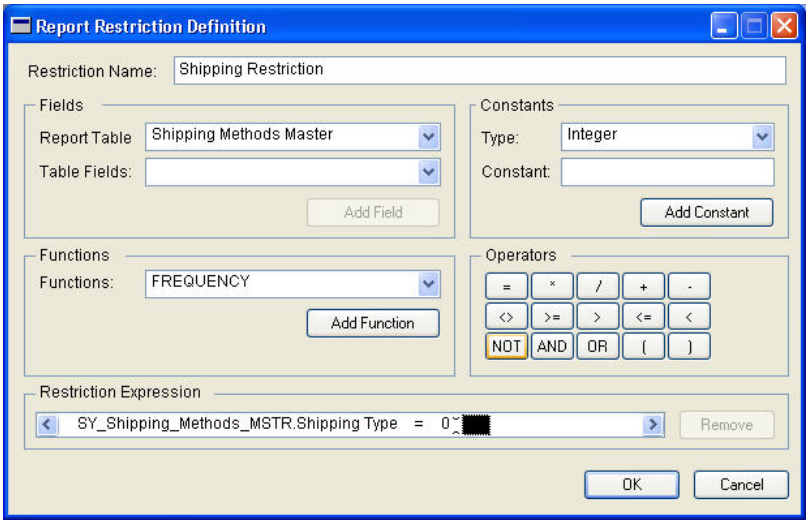
Company: Fabrikam, Inc.

Scenario: The Accounts Payable department would like a list of all the Shipping Methods they should be using when adding new Vendors or Vendor Classes. Make a copy of the Shipping Methods Report, and place a restriction on it to print only shipping methods that have shipping types set to pickup.

Need a Little Help?

1. Launch Report Writer from the **Customize** option on the **Tools** menu.
2. From the Original Reports list, highlight the Shipping Methods Report and select **Copy**. Enter Shipping Methods-Pickup Carriers as the name.
3. Open the report.
4. Next, create a restriction expression. The restriction you create requires the shipping type to be Pickup in order to include it on the report.

   Once you have written the expression, the window should look like the following illustration.



5. Select Restrictions to open the Report Restrictions window, and then select **New** to open the Report Restriction Definition window.

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6. Make the following entries:

Restriction Name	Shipping Restriction
Report Table	Shipping Methods Master
Table Fields	Shipping Type

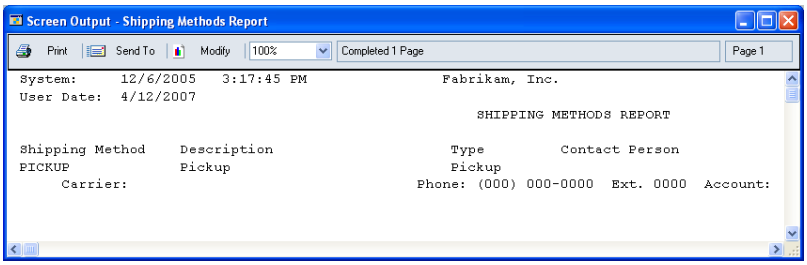
Click the **Add Field** button.

Operators	=
Type	Integer
Constant	0

Click the **Add Constant** button.

7. Close the window and save the restriction, then close the Report Restrictions window.
8. Click **OK** in the Report Definition window.
9. Print the report from the Modified Reports list, ensuring that the report only prints to the screen.

   The report appears in the Screen Output window as shown in the following illustration.



Only records that have shipping types set to pickup should appear on the report.

Lab 2.3 – Secondary Copy – Restrictions

Company: Fabrikam, Inc.

Scenario: The Payroll department has requested a list of the typical expense accounts that will be used for posting payroll expenses (accounts between 5000 and 6000) for any given department. You have decided to use the Administration department as an example. Include any other departments that begin with a "1" also. Since the restrictions for this report will not need to be changed on an ongoing basis, create the modified report as a secondary copy of the Accounts report.

HINT: *When working with the Microsoft Dynamics GP* ***Account Number*** *field in the Report Writer, note that the account number is actually stored as a string (composite) field even though it typically displays numeric characters. Some users may use numbers and letters in the account number field, so it is stored as a string field in the account table.*

Challenge Yourself!

Creating the Report

Create and open a secondary copy of the Accounts report. Name the report "Accounts- Restrictions Exercise."

Creating the First Restriction

Create the following restrictions:

First Restriction Name	Department Starts with a 1
Restriction Expression	GL_Account_MSTR.Account Number:Account_Segment_Pool1 = WILDCARD("1*")

1. Give a brief explanation of the syntax used in the restriction expression:

   GL_Account_MSTR: Account Number: Account_Segment_Pool1: = WILDCARD(1*):

2. Explain how the WILDCARD function is used.

Second Restriction Name	Accounts 5000 through 6000
Restriction Expression	GL_Account_MSTR.Account Number: Account_Segment_Pool2 >= "5000" AND GL_Account_MSTR.Account Number: Account_Segment_Pool2 <= "6000"

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3. Give a brief explanation of the syntax used in the restriction expressions:

   GL_Account_MSTR: Account Number:Account_Segment_Pool2: >= WILDCARD(1*):

   GL_Account_MSTR: Account Number:Account_Segment_Pool2: <= 6000:

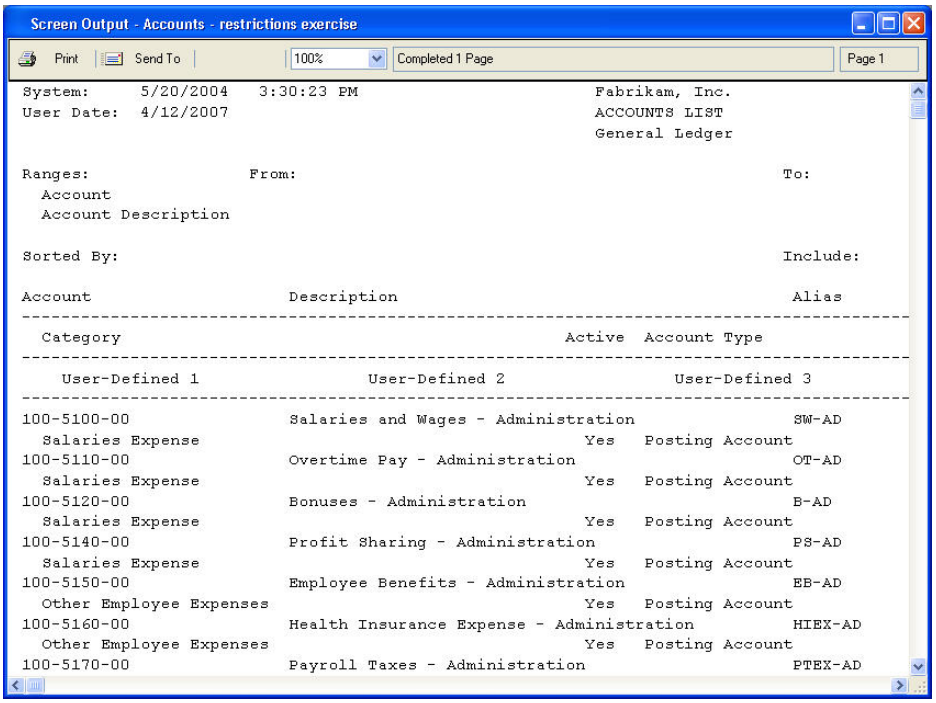
Printing the Report in Report Writer

From the Report Writer window, print the report to screen. After viewing the report, close the Screen Output window.

Printing the Report in Microsoft Dynamics GP

Do you need to grant access to this report before you can print it in Microsoft Dynamics GP? Why or why not?

Switch into the Microsoft Dynamics GP application. From the Custom Reports window, print the report, ensuring that the report only prints to the screen. The report should be similar to what is shown in the following illustration:



Lab 2.3 – Secondary Copy – Restrictions

Company: Fabrikam, Inc.

Scenario: The Payroll department has requested a list of the typical expense accounts that will be used for posting payroll expenses (accounts between 5000 and 6000) for any given department. You have decided to use the Administration department as an example. Include any other departments that begin with a "1" also. Since the restrictions for this report will not need to be changed on an ongoing basis, create the modified report as a secondary copy of the Accounts report.

HINT: *When working with the Microsoft Dynamics GP* ***Account Number*** *field in Report Writer, note that the account number is actually stored as a string (composite) field even though it typically displays numeric characters.*

Need a Little Help?

Creating the Report

1. Select Report Writer from the **Customize** option on the **Tools** menu.
2. From the Original Reports list, highlight the **Accounts** report and select **Copy**. Name the report "Accounts- Restrictions Exercise."
3. Open the Report.

Creating the First Restriction

1. Make the following selections in the Report Restriction Definition window:

Restriction Name	Department Starts with a 1

Restriction Expression: **Fields**

Report Table:	Account Master
Table Fields	Account Number: Account_Segment_Pool1

Click the **Add Field** button.

Operators	=
Functions	WILDCARD

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Constants

Type	String
Constant	1*

Click the **Add Constant** button.

The resulting restriction expression should be:

GL_Account_MSTR:

Account Number:Account_Segment_Pool1 = WILDCARD("1*")

2. Give a brief explanation of the syntax used in the restriction expression:

   GL_Account_MSTR:

   Account Number:Account_Segment_Pool1:

   =:

   WILDCARD(1*):

3. Explain how the WILDCARD function is used.
4. Save the restriction and close the window.

Creating the Second Restriction

1. Open the Report Restriction Definition window, and make the following selections:

Restriction Name	Accounts 5000 through 6000

Restriction Expression: **Fields**

Report Table:	Account Master
Table Fields	Account Number: Account_Segment_Pool2

Click the **Add Field** button.

Operators	>=

Constants

Type	String
Constant	5000

Click the **Add Constant** button.

Operators	AND

Fields

Report Table:	Account Master
Table Fields	Account Number: Account_Segment_Pool2

Click the **Add Field** button.

Operators	<=

Constants

Type	String
Constant	6000

Click the **Add Constant** button.

The resulting restriction expression should be:

GL_Account_MSTR.Account Number:Account_Segment_Pool2 >= "5000" AND

GL_Account_MSTR.Account Number:Account_Segment_Pool2 <= "6000"

2. Give a brief explanation of the syntax used in the restriction expression:

   GL_Account_MSTR:

   Account Number:Account_Segment_Pool2:

   >=:

   5000:

   AND:

   GL_Account_MSTR:

   Account Number:Account_Segment_Pool2:

   <=:

   6000:

3. Save the restriction and close the window.
4. Click **OK** to close the Report Definition window.

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Printing the Report in Report Writer

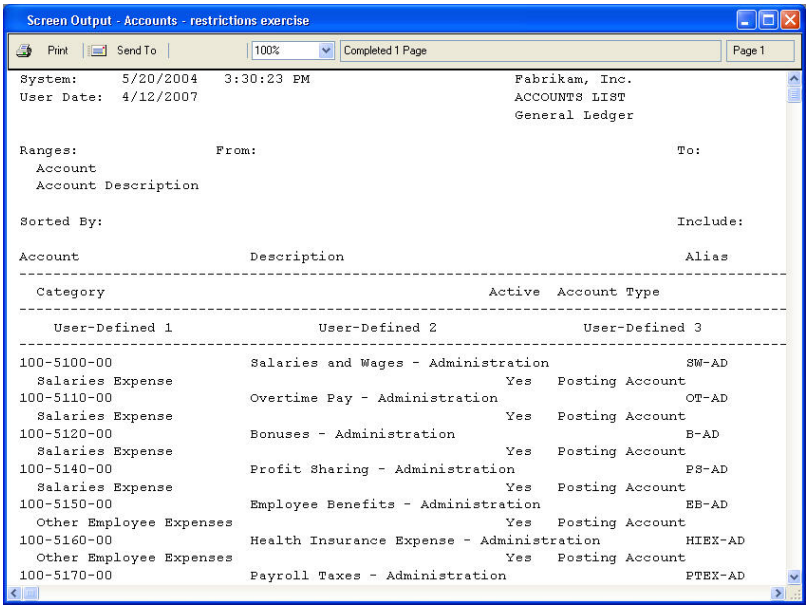
From the Report Writer window, print the report to screen. After viewing the report, close the Screen Output window.

Printing the Report in Microsoft Dynamics GP

Do you need to grant access to this report before you can print it in Microsoft Dynamics GP? Why or why not?

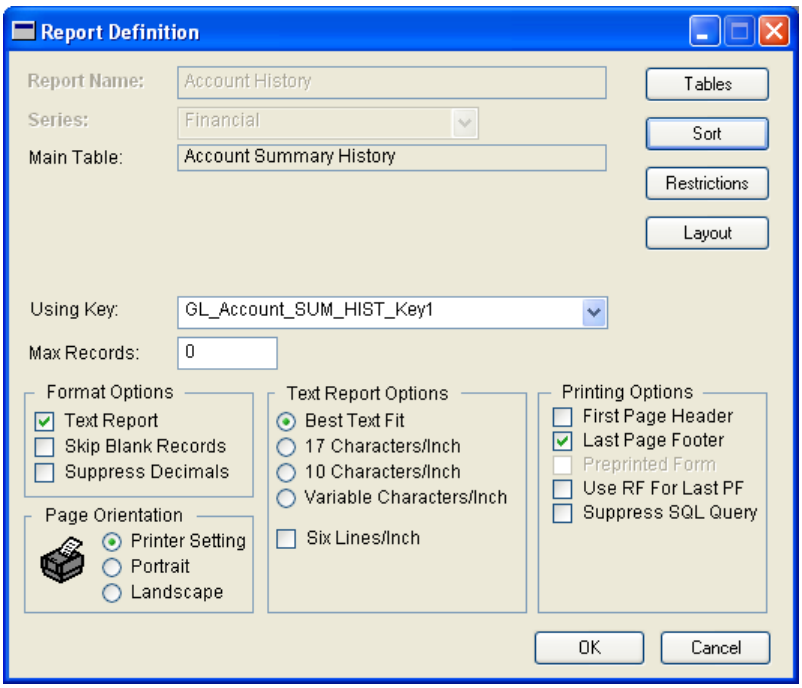
1. Switch into the Microsoft Dynamics GP application. Open the Custom Reports window.
2. Select Microsoft Dynamics GP as the Product in the Custom Reports window.

   Note that the Accounts- restrictions exercise report is listed in the Custom Reports list under the Financial Series.
3. Print the report, ensuring that the report only prints to the screen.



Test Your Knowledge – Report Definition Window

Answer the following questions about the Report Definition window using the information provided in this chapter.



1. The Series indicates the Series to select when granting security access to a report in Microsoft Dynamics GP. What else is this option used for?

2. What should you take into consideration when selecting the main table for a report?

3. What is the function of the **Using Key** field?

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4. How can you find out what fields make up a particular key?

5. Look up the General Ledger Trial Balance Temporary table using Table Descriptions. How many keys are associated with this table?

6. What fields make up each key?

7. Can you change the **Using Key** field for a primary copy of a report?

8. Can you change the **Using Key** field for a secondary copy of a report?

9. What does Max Records set to 0 indicate?

10. What type of report are you working with if the **Text Report** check box is clear?

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11. What is the function of the **Skip Blank Records** check box?

12. What is the function of the **Suppress Decimals** check box?

13. What is the function of the **Best Text Fit** option button?

14. What is the function of the **Variable Characters/Inch** option button?

15. What is the function of the **Six Lines/Inch** check box?

16. What is the function of the **Preprinted Form** check box?

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Conclusion

Report Definition Window, Sorting, and Restricting

Some key points to remember from this chapter include:

- The Report Definition window allows you to make changes and select options for reports.
- The Report Name, Series and Main Table cannot be changed when modifying primary copies of a report.
- Secondary copies allow greater flexibility since they are most like custom reports.
- The **Using Key** field is used to select a sort for the report; user-defined sorts can be created by clicking the **Sort** button.
- The **Max Records** field lets you restrict the amount of records printed on a report.
- Page Orientation and Text Report Options can be selected on the Report Definition window.
- Multiple sorts for a report can be defined in the Sorting Definition window.
- Restriction expressions can be used to restrict the amount and type of information that will appear on reports.

Quick Interaction: Lessons Learned

Take a moment to write down three Key Points you have learned from this chapter:

1.

_____

_____

_____

_____

2.

_____

_____

_____

_____

3.

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