



Microsoft Dynamics™ GP  
**Working with Crystal Reports**

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# Introduction

This manual contains information about using Crystal Reports with Microsoft Dynamics™ GP.

## What’s in this manual



This manual provides specific information about using Crystal Reports version 11 with Microsoft Dynamics GP.

To use Crystal Reports with Microsoft Dynamics GP, you must set up an Open Database Connectivity (ODBC) data source to connect to the accounting system data. Information about setting up and using ODBC data sources with Microsoft Dynamics GP can be found in the installation documentation for Microsoft Dynamics GP.

This manual does not provide detailed information about using Crystal Reports. Refer to the documentation included with Crystal Reports to learn more about using the product.

## Symbols and conventions

To help you use this documentation more effectively, we’ve used the following symbols and conventions within the text to make specific types of information stand out.

Symbol	Description
	The light bulb symbol indicates helpful tips, shortcuts and suggestions.
	Warnings indicate situations you should be aware of.
<i>Margin notes summarize important information.</i>	Margin notes call attention to critical information, and direct you to other areas of the documentation where a topic is explained.

Convention	Description
Chapter 3, "Samples"	Quotation marks indicate a chapter name.
<i>Account numbers</i>	Italicized type indicates a section name.
GENDDF.PDF	Words in uppercase indicate a file name.
Open Database Connectivity (ODBC)	Acronyms are spelled out the first time they're used.
TAB or ALT+M	Small capital letters indicate a key or a key sequence.

## Product support

Technical support for accessing Microsoft Dynamics GP data with Crystal Reports can be accessed using the following methods.

- **Telephone support** – Technical Support at (888) 477-7877 between 8:00 a.m. and 5:00 p.m. Central Time, Monday through Friday. International users can contact Technical Support at (701) 281-0555.
- **Internet** – Technical Support is also available through CustomerSource or PartnerSource, and can be accessed at **[www.microsoft.com/businesssolutions](http://www.microsoft.com/businesssolutions)**.

We do not provide support for using the Crystal Reports application. Contact the developer of Crystal Reports if you need assistance using the product.





# Chapter 1: Connecting to Data

This portion of the documentation describes how data is stored in Microsoft Dynamics GP. It also describes how to determine which tables you need to use to gather the data for your report. Information is divided into the following sections:

- [\*The Microsoft Dynamics GP database\*](#)
- [\*Identifying related tables\*](#)
- [\*Creating links in Crystal Reports\*](#)

## The Microsoft Dynamics GP database

To work with the Microsoft Dynamics GP database, you need to know some specific information about tables in the database. This section describes the following:

- *Table names*
- *Table types*

### Table names

Each table has three names: a *display name*, a *technical name* and a *physical name*.

- The display name is the name you see in a window, such as Rebuild or Pathnames.
- The technical name is used internally to refer to the table. You will use a table's technical name when you refer to it with ODBC.
- The physical name is the name under which the table is stored by the operating system or database.

The following table lists three names for one of the tables that stores account category information.

<b>Display name:</b>	Account Category Master
<b>Technical name:</b>	GL_Account_Category_MSTR
<b>Physical name:</b>	GL00102

*You can use the Table Descriptions window to find the names of tables.*

## Types of tables

Most of the information you'll need to access when creating reports will be stored in one of the following types of tables. Knowing which type of table contains the information you want will help you find the data you need.

**Setup tables** contain all the default settings and module options you've specified in the setup windows for each series.

**Master tables** contain all the permanent data about your business. These may include information about accounts, vendors, customers, items, and so on.

**Work tables** contain unposted batches of transactions entered using windows that can be opened using the Transactions button on the toolbar. These transactions are temporary and can be changed or deleted until they are posted to an open table.

**Open tables** contain posted transactions for the current year, of which some may be unpaid. Information in open tables is moved to history tables when the transactions are paid.

**History tables** contain paid transactions, or transactions from a previous year.

## Identifying related tables

To create a report, you need to decide which tables data will come from. If all the data for your report is stored in a single table, you can select the table as the main table for the report and begin creating your report.

If a single table doesn't contain all the data you need for your report, you must choose one table as the primary table, and then link additional tables to it. You can select either the table that contains the majority of the fields for your report or the table that contains the most general information as your main table. Once you've selected a main table, link other tables to that table as needed.

If you need to use multiple tables for your report, you must decide which tables need to be linked. Two methods can be used to find out which tables need to be linked for a report: table groups and table relationships.

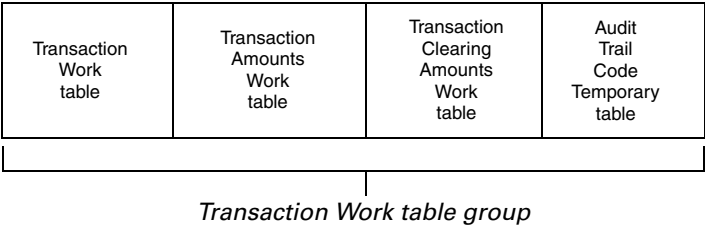
Table groups

A table group is a group of logically-related tables. For example, a customer master table, a customer address table and a customer history table all compose a table group. Every table in Microsoft Dynamics GP is part of a table group. Often, the data for a report will come from the tables in a table group.

The table types described in the previous section – setup, master, work, open and history – are actually table groups. These table groups are actually composed of information stored in several separate tables. For example, the General Ledger Transaction Work Table is a table group, made up of the following tables:

- Transaction Work (GL\_TRX\_HDR\_WORK)
- Transaction Amounts Work (GL\_TRX\_LINE\_WORK)
- Transaction Clearing Amounts Work (GL\_TRX\_Clearing\_WORK)
- Audit Trail Code Temporary (GL\_Audit\_Trail\_WORK)

Technical table names are shown above in parentheses. General information about each transaction, such as the audit trail code and date, are stored in the Transaction Work (GL\_TRX\_HDR\_WORK) table, and transaction amounts are stored in the Transaction Amounts Work (GL\_TRX\_LINE\_WORK) or Transaction Clearing Amounts Work (GL\_TRX\_Clearing\_WORK) table, depending upon whether you’ve entered a standard transaction or a clearing transaction.



In some cases, a table group will contain only one table. For many system tables, the table group is made up of a single table with the same name as the table group.



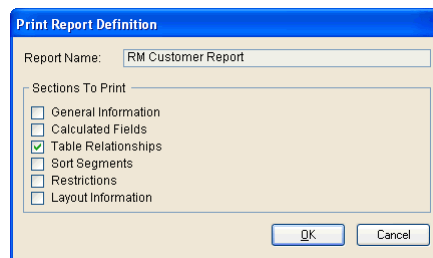
*You can use the Software Development Kit (SDK) to find additional information about tables in Microsoft Dynamics GP.*

## Table relationships

Table relationships are links between two Microsoft Dynamics GP tables that show how the data in the two tables is related. Table relationships are based on fields that exist in both tables.

If you were using the Report Writer that is built into Microsoft Dynamics GP to create a report, you'd have access to the table relationships that have already been defined. Unfortunately, this table relationship information can't automatically be used in Crystal Reports. You must create the links between related tables so Crystal Reports can properly access the data for the report.

The easiest way to determine which fields to use when linking tables in Crystal Reports is to find out what tables are used for an existing report in Microsoft Dynamics GP. Do this by starting the Report Writer, then printing the report definition for the specified report. Be sure the Table Relationships option is marked, as shown in the following illustration.



The resulting report will list the tables that are used and show how they are related.

Another way to find out what tables are needed for a report is to use the Tables window in the Microsoft Dynamics GP Report Writer. First, determine the table you want as the primary table for your report and any secondary tables your report will be using. Use the following procedure to find how the link is set up between the related tables and how to re-create that link in Crystal Reports.

### 1. In the Report Writer, open the Tables window.

Open the Tables window by clicking the Tables button on the toolbar.

**2. Select the primary table.**

Select the table you want to use as the primary table and click Open. The Table Definition window will appear.

**3. Display the relationships for the table.**

Click Relationships; the Table Relationship window will open.

**4. Select the table you want to use as the secondary table.**

If the table you want to use as the secondary table doesn't appear in the Table Relationships list, a predefined table relationship doesn't exist between those two tables.

**5. View the relationship information.**

Click Open; the Table Relationship Definition window will appear. Note the fields in the Primary table column and their corresponding fields in the Secondary Column; those are the fields you'll need to link in Crystal Reports.



*Don't be concerned if there are additional fields listed in the Secondary Table column that don't have a corresponding field in the Primary Table column. Those additional fields are part of the secondary table's key, but aren't being used for this particular table relationship.*

## Creating links in Crystal Reports

To create links in Crystal Reports, complete the following procedure:

**1. Start Crystal Reports.****2. Create a report.**

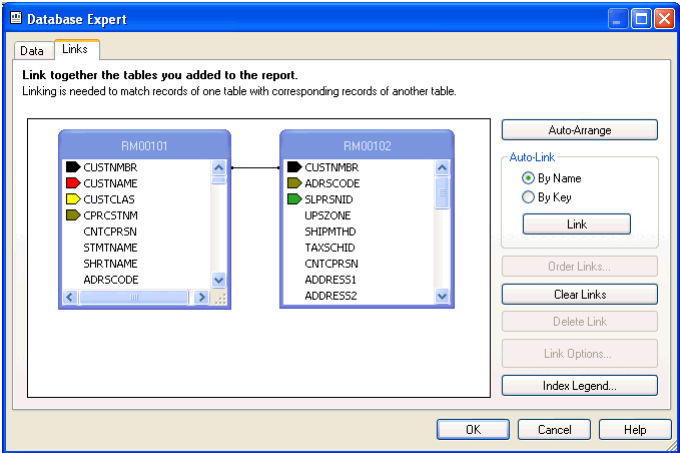
We recommend using the Report Wizard in Crystal to help you create your report.

**3. Select the tables you want to use.**

Use the Database Expert in Crystal Reports to select the tables that contain the data for your report.

4. Create links between tables.

Use the Links tab in the Database Expert to connect the fields from the first table to the corresponding fields from the second table. In the following example, the Customer Number field is used to establish a link between the Customer Master table and the Customer Master Summary table. Here’s how the link would appear in Crystal Reports.



Be sure to carefully examine the links that Crystal Reports automatically adds between the tables you selected. Crystal Reports automatically defines links between “Header,” “Date Created” and other fields that should not used to link tables in Microsoft Dynamics GP. You should remove those links in order to link the two tables correctly. Select the arrow between the header fields, then press the DELETE key.

When you have finished defining links, click OK in the Database Expert to close it. The tables you selected should be listed in the Field Explorer. You can then add fields from those tables to your report.

# Chapter 2: Using Crystal Reports

This portion of the documentation contains specific information about using Crystal Reports to access Microsoft Dynamics GP data. Information is divided into the following sections:

- [\*Data types\*](#)
- [\*Using formula fields in Crystal Reports\*](#)
- [\*Account numbers\*](#)
- [\*Updating reports for a new release\*](#)

## Data types

Crystal Reports can read Microsoft Dynamics GP tables but not the corresponding data type and format definitions. Reports you create may print the integer or the unformatted text values that are stored, rather than the more descriptive information that you might expect. To ensure that the information appears on the report the same way it does in the accounting system, you'll need to apply additional formatting using Crystal Reports formulas.

For example, Microsoft Dynamics GP doesn't store a drop-down list containing three selections, Weekly, Monthly and Quarterly, as the string values of those selections. Instead, an integer is stored that corresponds to the position of each item in the list. When that information is displayed in a window, Microsoft Dynamics GP automatically interprets the data type and displays the correct text. Also, Microsoft Dynamics GP stores formatted text without formatting. For example, a phone number is stored without the parentheses and hyphens that would appear when viewed in the accounting system.

The following data types are used in Microsoft Dynamics GP tables.

Check box	Drop-down list	Radio group
Combo box	List box	String
Composite	Long integer	Text
Currency	Multi-select list box	Time
Date	Non-native list box	

## Check box

Check box fields appear 0 for Unmarked and 1 for Marked. For example, the Customer Maintenance window has a check box field to indicate whether the customer record is Inactive. If Inactive is selected, the field appears in Crystal Reports as 1. If Inactive is not selected, the field appears as 0. To handle a field of this type in Crystal Reports so that it will show meaningful information, set up a formula similar to this:

```
if {table.listfield} = value
then "string"
```

For example:

```
if {RM_Customer_MSTR.INACTIVE} = 1
then "Inactive"
```

## Combo box

Combo box fields are printed as string values, with all of the appropriate formatting.

## Composite

Composite fields show each component of the composite as a separate field. For example, an account number will print each individual account segment as a separate field. To print the composite field, concatenate the fields by entering this formula:

```
{number1}+"-"+{number2}
```

For example:

```
{GLACCTMSTR.ACTNUMBR_1}+"-"+{GLACCTMSTR.ACTNUMBR_2}+"-"  
"+{GLACCTMSTR.ACTNUMBR_3}
```

This will result in the three separate fields, “000” “1100” “00” being printed as “000-1100-00”.



## Currency

Currency fields are stored in a 14.5 format, which means that you will most likely see 5 decimal digits after the decimal place. To print the correct number of decimal places, enter this formula:

```
$table.currencyfield
```

For example:

```
${SOPHDR.DOCAMNT}
```

You also may want to use the Format Field function and click Suppress if Zero. In addition, use Format Field to set the desired number of decimals places such as 1.00, 1.000, 1.000, 1.00000 and so on.

## Date

Date fields are stored as one individual field and will appear on reports in this format: MM/DD/YY. If this format is appropriate, you can simply add the data field directly to the report.

## Drop-down list

Drop-down list fields are printed as integer values and won't show associated text. The integer value of 1 is equal to the first text value in the list. To print these fields as text values, set up a conditional formula for the field. For example, a Valuation Method list might contain five items: 1. FIFO Perpetual, 2. LIFO Perpetual, 3. Average Perpetual, 4. FIFO Periodic and 5. LIFO Periodic:

To view the actual text values instead of the integer values, set up a formula similar to this:

```
if {table.listfield} = value
then "string"
else
if {table.listfield} = value
then "string"
else
if {table.listfield} = value
then "string"
else
```

...and so on. For example:

```
if {IV_Item_Class_SETP.VCTNMTHD} = 1
then "FIFO Perpetual"
else
if {IV_Item_Class_SETP.VCTNMTHD} = 2
then "LIFO Perpetual"
else
if {IV_Item_Class_SETP.VCTNMTHD} = 3
then "Average Perpetual"
```

...and so on.

Now, when the value of the field is “1,” Crystal Reports will print “FIFO Perpetual.” You may need to adjust the field format to allow for variable lengths.

## **Integer**

Integer fields are printed the same way they appear in the accounting system.

## **List box**

List boxes are printed as an integer values and won’t show associated text. To print the correct values, create a new field and enter the appropriate formula (see the example under Drop-down list).

## **Long integer**

Long integer fields are printed the same way they appear in the accounting system.

## **Multi-select list box**

Multi-select list boxes are stored in a binary format. You can’t use this type of field in Crystal Reports.

## **Non-native list box**

Non-native list boxes are printed as integer values and won’t show associated text. To print the correct values, create a new field and enter the appropriate formula (see the example under Drop-down list).

## Radio group

Radio groups are printed as integer values and won't show associated text. The integer value of 0 is equal to the first radio button in the group. To print the text values, create a new field and enter the appropriate formula (see the example under Drop-down list, but note that the first integer for a radio group is 0 instead of 1).

## String

String fields are printed in Crystal Reports as string values, without formatting. For example, phone numbers are printed as 1235551234. To correct, create this formula (adapt as needed for other fields or formats):

```
"(" + {tablename.phonefield} [x to y] + ")" + {tablename.phonefield}
[x to y] + "-" + {tablename.phonefield} [x to y]
```

For example:

```
"(" + {RM00102.PHONE1} [1 to 3] + ")" + {RM00102.PHONE1} [4 to 6] +
"-" + {RM00102.PHONE1} [7 to 10]
```

This will result in a new phone field formatted this way: (123) 555-1234.

## Text

Text fields are printed as they appear in the accounting system.

## Time

Time fields are stored as one individual field and will appear on reports in this format: HH:MM:SS. If this format is appropriate, you can simply add the data field directly to the report.

## Using formula fields in Crystal Reports

To print the fields correctly on your reports as they would appear in the accounting system, you'll create new formula fields in Crystal Reports. You'll actually pull the information from the table into the formula, manipulate it and then add the formula to the report.

To create a formula field in Crystal Reports, complete the following procedure:

- 1. Open a report.**

Start Crystal Reports. Open or select a report.

- 2. Create a formula field.**

In the Field Explorer, locate the Formula Fields item. Right-click on the Formula Fields item and choose New.

- 3. Name the formula field.**

Enter an appropriate name for the formula field. Choose whether you want to use the Formula Editor or the Formula Expert to edit the formula field.

- 4. Compose the formula.**

Use the Formula Editor or the Formula Expert to define the formula field. Refer to the Crystal documentation for information about creating formula fields.

- 5. Add the formula field to the report.**

Drag the formula field from the Field Explorer and position it on the report layout.

## Account numbers

Account numbers aren't stored with most records in the accounting system. Instead, an "account index" is stored that corresponds to a specific account number. To use an account number on a report, you must use the Account Index field to create a link to a field that contains the Account Number. Typically, you will link to the Account Master or Account Index Master tables to retrieve the account number. You will actually place the Account Number field from this linked table on your report.

The Account Number field is a composite, so you will have to supply the appropriate formatting for it on your report. Refer to the description of composites in [Data types](#) on page 11 for information about formatting composite fields.

## Updating reports for a new release

Typically, when a new version of Microsoft Dynamics GP is released, some fields, keys and table relationships will have changed. As a result, reports that were created for the previous Microsoft Dynamics GP release may no longer have the correct links, and they become unusable. To correct this, update your reports. Follow these steps to update any reports that you've created using Crystal Reports.

### 1. Install the update.

Install the new Microsoft Dynamics GP release and update your accounting data.

### 2. Open a report and update it.

Open each report that has been created in Crystal Reports and choose Verify Database from the Database menu. You may be asked if you want to "proceed to fix up the database." Respond Yes. If changes to the tables are minor, the report will be updated automatically.

Repeat this process for all reports that have been created with Crystal Reports.

Some tables that have undergone major changes may not be updated by the Verify Database process. Refer to the technical documentation provided with the Microsoft Dynamics GP release for information about which tables are most likely to be affected.



## Chapter 3: Sample Reports

This chapter describes a number of reports created using Crystal Reports to access Microsoft Dynamics GP data. The following samples are described:

- [\*Sample 1: PO Inquiry Report\*](#)
- [\*Sample 2: Order Inquiry Report\*](#)
- [\*Sample 3: Commissions Report\*](#)
- [\*Sample 4: Source Posting Report\*](#)

## Sample 1: PO Inquiry Report

This report allows you to print a customer and a range of Purchase Order numbers. You could use this report to determine the status of a particular Purchase Order. For example (as shown in the sample report below), PO# 2411 is still listed as being an open order (ORDST2226), but PO# 2722 has already been invoiced (STDINV2260).

You may also want to add the shipping method, ship date or expected ship date and otherwise customize the report to your liking.

<b>Report Name</b>	PO Inquiry Report
<b>Physical Tables</b>	SOP_HDR_WORK table (SOP10100) RM_CUSTOMER_MSTR table (RM00101)

PURCHASE ORDER INQUIRY					
3/23/2004					
<u>Customer No.</u>	<u>Customer Name</u>	<u>Cust. PO No.</u>	<u>Doc. Number</u>	<u>Doc. Date</u>	<u>Total</u>
AARONFIT0001	Aaron Fitz Electrical	2031	QTEST1022	3/5/2007	85.55
		2411	ORDST2226	4/12/2007	930.20
		2117	FULORD1000	4/12/2007	338.25
		2132	FULORD1003	4/12/2007	49.85
		2337	FULORD1006	4/12/2007	5,828.55
		2366	FULORD1008	4/12/2007	192.45
		2722	STDINV2260	4/12/2007	481.35



To create the Customer PO Inquiry report, do the following:

**1. Create a new report.**

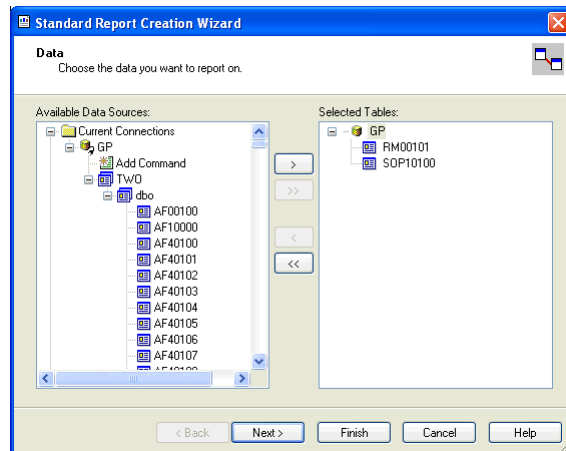
Start Crystal Reports and choose New to create a new report.

**2. Select a standard report.**

In the Crystal Reports Gallery window, choose Standard. Click OK to continue.

**3. Choose the tables to use for the report.**

In the Standard Report Creation Wizard, select the tables that will be used for the report.



Select RM00101 (RM\_CUSTOMER\_MSTR) and then select SOP10100 (SOP\_HDR\_WORK) to add them to the Selected Tables list.

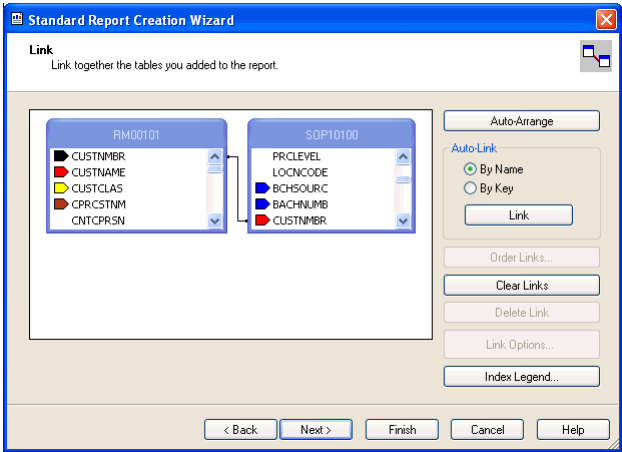
Click Next to specify how the tables are linked.

**4. Link the two tables.**

The Standard Report Creation Wizard will display the two tables you selected, allowing you to create a link between them. To link the two tables, do the following:

- Scroll through both tables to find the common field, in this case CUSTNMBR.

- If the link doesn't already exist, click on the CUSTNMBR field in the RM00101 table and drag to the corresponding field in the SOP10100 table.



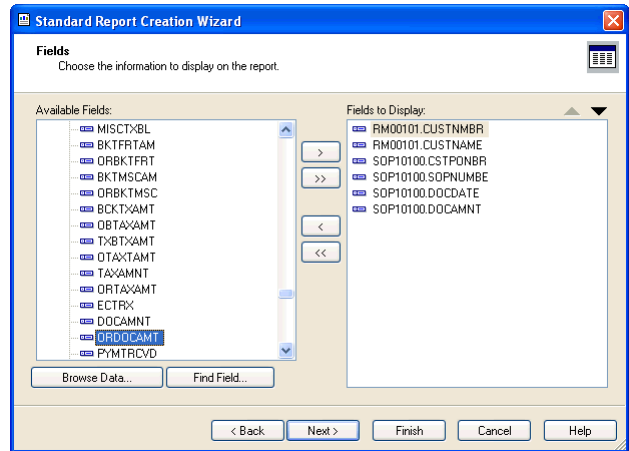
Click Next to select the fields for the report.

**5. Add fields to the report.**

Add the following fields in the order specified.

Table	Fields	Column Heading
RM00101	CUSTNMBR	Customer No.
	CUSTNAME	Customer Name
SOP10100	CSTPONBR	Cust. PO No.
	SOPNUMBE	Doc. Number
	DOCDATE	Date
	DOCAMNT	Total

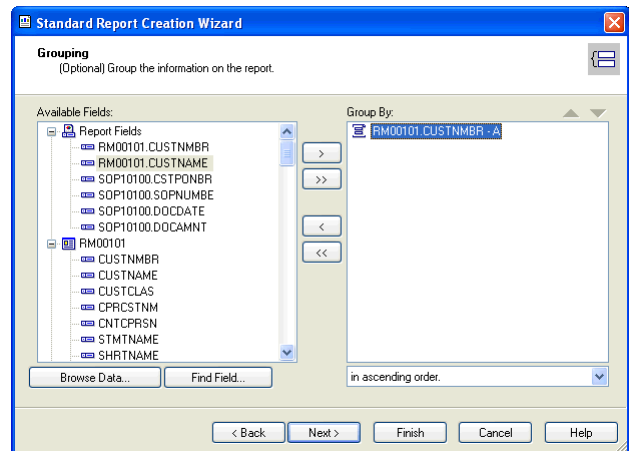
Select each field in the appropriate table and add it to the report.



When all fields have been added, click Next.

## 6. Specify how the data will be grouped.

The data for the report should be grouped according to the customer number. Select the CUSTNMBR field and add it to the Group By list. The content of the report will be grouped according to this field.



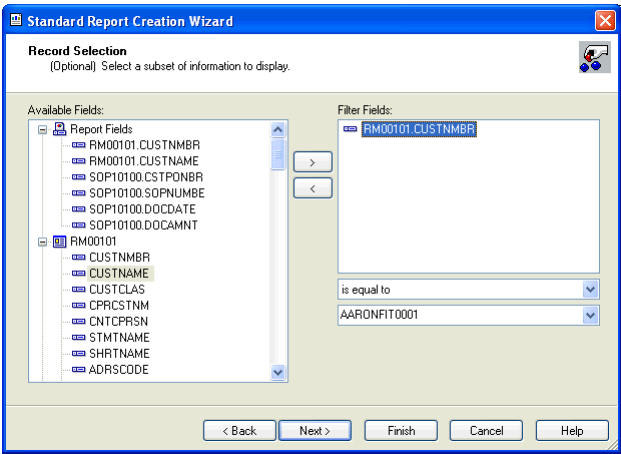
Click Next until you see the window used to specify the Selection criteria for the report.

**7. Add selection criteria to the report.**

Select the RM00101.CUSTNMBR field and click Add. Specify a restriction for the report, indicating which customer you want to restrict on. For example, the following restriction limits the results to those for Aaron Fitz Electrical.

is equal to AARONFIT0001

The selection window should look like the following illustration.



**8. Specify a template (optional).**

Click Next to specify a template for the report. Then click Finish.

**9. Preview the report.**

Click Preview Sample to preview the report. Go ahead and make changes to the layout of the report as needed.

## Sample 2: Order Inquiry Report

The Order Inquiry Report allows you to enter a range of order numbers. You could also customize this report by adding the ability to limit the search to one particular customer if desired.

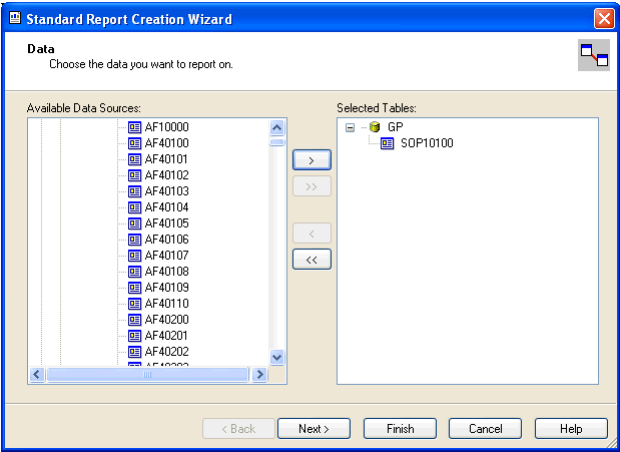
This report is useful in cases where an organization might have several customers who remit checks with the original order number listed, instead of the final invoice number and will reduce the need for a user to look up one order at a time.

<b>Report Name</b>	Order Inquiry Report
<b>Physical Tables</b>	SOP_HDR_WORK table (SOP10100)

ORDER INQUIRY				
7/18/00				
Orig Number	Customer Number	Customer Name	Sales Invoice No.	Date
ORD1002	METROFCL0	Metropolitan Fiber Systems	INV 1016	5/10/99
ORD1007	ASTORSUI00	Astor Suites	INV 1020	5/10/99
ORDPH1000	MAGNIFIC00	Magnificent Office Images	BKO1000	4/28/99
ORDPH1001	CARVELLB0	Carvell-Berry Inc.	BKO1001	5/10/99
ORDPH1005	LECLERC000	LeClerc & Associates	INV PS 1004	5/10/99
ORDPH1006	BOYLES000	Boyle's Country Inn's	INV PS 1005	5/10/99
ORDPH1007	CARVELLB0	Carvell-Berry Inc.	INV PS 1006	5/10/99
ORDST1016	BAKERSEM0	Baker's Emporium Inc.	INV 1021	5/10/99
ORDST1017	LEISURET00	Leisure & Travel Consultants	BKO1002	5/20/99
QTE1000	ASSOCIAT00	Associated Insurance Company	ORDST1002	4/28/99
QTEST1008	BREAKTHR0	Breakthrough Telemarketing	INV PS 1002	5/10/99
QTEST1019	CASTLEIN00	Castle Inn Resort	ORDST1022	7/7/99
QTEST1020	ADVANCED	Advanced Tech Satellite System	ORDST1023	7/7/99

To create the Order Inquiry report, do the following:

- 1. **Create a new report.**  
Start Crystal Reports and choose New to create a new report.
- 2. **Select a standard report.**  
In the Crystal Reports Gallery window, choose Standard. Click OK to continue.
- 3. **Choose the table to use for the report.**  
In the Standard Report Creation Wizard, select the table that will be used for the report.

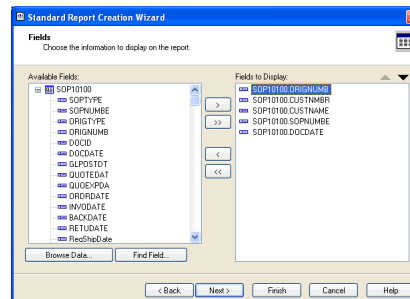


Select the SOP10100 (SOP\_HDR\_WORK) table to add it to the Selected Tables list. Click Next to specify the fields to use for the report.

- 4. **Add fields to the report.**  
Add the following fields in the order specified.

Table	Fields	Column Heading
SOP10100	ORIGNUMB	Orig Number
	CUSTNMBR	Customer Number
	CUSTNAME	Customer Name
	SOPNUMBE	Sales Invoice No.
	DOCDATE	Date

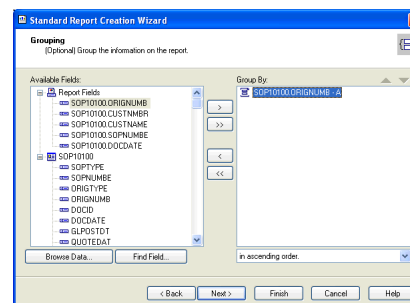
Select each field click and add it to the report.



When all fields have been added, click Next to specify how the data will be grouped.

**5. Specify how the data will be grouped.**

The data for the report should be grouped according to the originating document number. Select the ORIGNUMB field and add it to the Group By list. The content of the report will be grouped according to this field.



Click Finish to complete the report.

## 6. View the report.

Make changes to the layout of the report as needed.

### Sample 3: Commissions Report

This report helps you do a simple commission calculation. This report uses three tables, including the RM\_Commission\_WORK table (RM10501) because this table contains all paid-to-zero sales transactions.

Salespeople must sell over \$100,000 before they will begin to receive commissions. This report creates a running sum of the sales for each salesperson. If the total is greater than \$100,000.00, the commission is calculated by taking the total sales minus the \$100,000, and then multiplying by the salesperson's commission percent from the salesperson's master file.

<b>Report Name</b>	Commission Report
<b>Physical Tables</b>	RM_Salesperson_MSTR table (RM00301) RM_Commission_WORK table (RM10501) RM_Customer_MSTR table (RM00101)

COMMISSION REPORT			
3/23/2004			
FRANCINE B.	<u>Customer Name</u>	<u>Doc Number</u>	<u>Sale Amount</u>
	Breakthrough Telemarketing	INVPS1002	39.80
		STDINV 2211	21,599.55
		STDINV 2223	1,219.90
		STDINV 2174	19.90
		STDINV 2116	1,219.90
		STDINV 2104	21,599.55
		SV C1012	1,526.98
		STDINV 2067	19.90
		SLS1015	1,269.87
		SLS1016	3,252.10
		SLS1017	3,607.69
		SLS1018	3,587.12
	Dollis Cove Resort	SLS15064	4,141.94
	LeClerc & Associates	INVPS1004	1,234.40
		SLS2016	13,655.74
		SLS12062	2,564.88
	Northern Family Hospital	SV C3015	566.21
		SLS3016	1,596.21
		SLS13061	7,620.29
		SLS13062	2,892.25
		SLS13063	1,723.98
		SLS13064	4,150.00
	Novia Scotia Tech. Institute	SV C14064	1,015.99
		SLS4015	2,590.66
		SLS4016	1,520.04
		SLS14062	6,899.54
		SLS14063	1,956.87
		SLS14065	3,500.00
			116,591.26
			<u>497.74</u>



To create the Commissions report, do the following:

**1. Create a new report.**

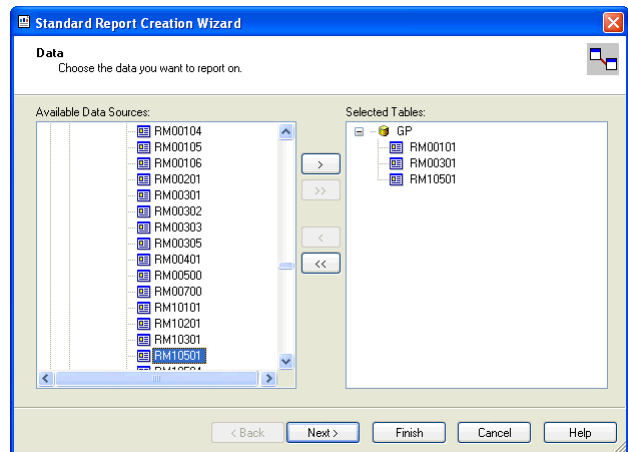
Start Crystal Reports and choose New to create a new report.

**2. Select a standard report.**

In the Crystal Reports Gallery window, choose Standard. Click OK to continue.

**3. Choose the tables to use for the report.**

In the Standard Report Creation Wizard, select the tables that will be used for the report.



Select the RM00101 (RM\_CUSTOMER\_MSTR), the RM00301 (RM\_SALESPERSON\_MASTER), and the RM10501 (RM\_COMMISSION\_WORK) tables and add them to the Selected Tables list.

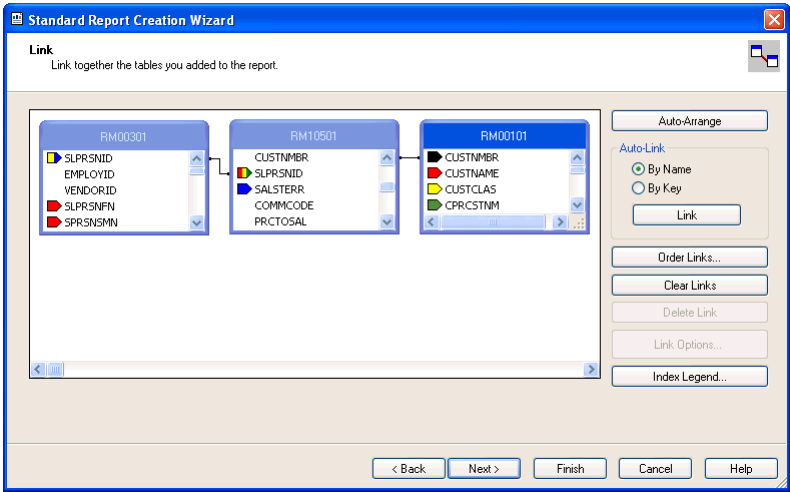
Click Next to specify how the tables are linked.

4. Link the tables.

The Standard Report Creation Wizard will display the tables you selected, allowing you to create links between them. To link the tables, do the following:

- Scroll through the RM00301 (Salesperson Master) table and the RM10501 (Commission Work) table to locate the common field, SLPRSNID. Click on the SLPRSNID field in the RM00301 table and drag to the corresponding field in the RM10501 table.
- Scroll through the RM00101 (Customer Master) table and locate the CUSTNMBR field. Click on the CUSTNMBR field in the RM10501 table and drag to the corresponding field in the RM00101 table.

When you have finished, the window should look like the following illustration.



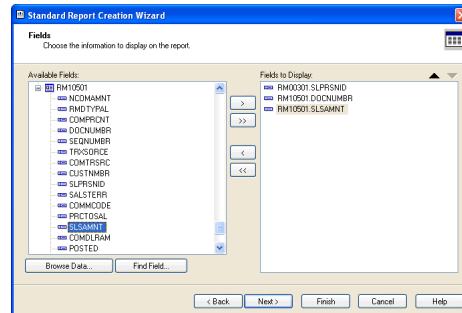
Click Next to select the fields for the report.

5. Add fields to the report.

Add the following fields in the order specified.

Table	Fields	Column Heading
RM00301	SLPRSNID	Salesperson
RM10501	DOCNUMBR	Document Number
RM10501	SLSAMNT	Sale Amount

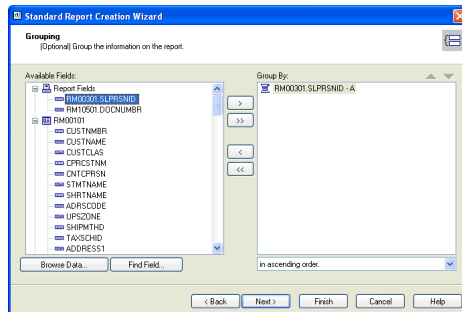
Select each field in the appropriate table and add it to the report.



When the fields have been added, click Next. The Grouping window will be displayed.

## 6. Specify a group for the report.

The items in the report should be grouped by salesperson, so add the SLPRSNID field in the RM00301 (Salesperson Master) table to the Group By list.



## 7. Create the report layout.

Click Finish to create the report layout. The remainder of the report will be created from this view.

## 8. Create formula fields for the report.

This report uses several formula fields to display data. To create a formula field, right-click on the Formula Field item in the Field Explorer, and choose New. Name the formula field and click Use Editor. The Formula Editor window will appear, allowing you to create the formula field.

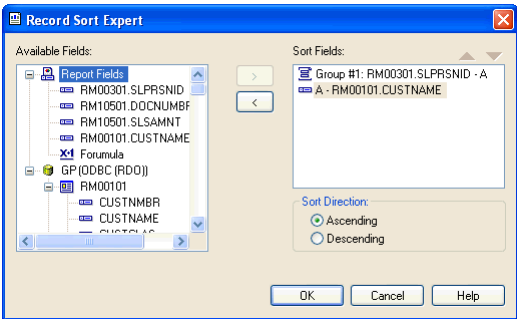
Create the following formula fields for this report.

Formula field	Description	Formula
Sale Amount	If the document for the sale is a return, the value 0 is returned. Otherwise, the amount of the sale is returned. This formula field should be placed in each line in the SLPRSNID group.	if({RM10501.DOCNUMBR} startswith 'RTN') then 0 else {RM10501.SLSAMNT}
Total Sales	Creates a running total of the sales for the current salesperson. This formula field should be placed in the footer for the SLPRSNID group.	sum({@Sale Amount}, {RM00301.SLPRSNID})
Commission	Calculates the commission based on the value calculated in Total Sales. If the value exceeds \$100,000, the commission is calculated based on the commission percentage for the salesperson. This formula field should be placed in the footer for the SLPRSNID group.	if({@Total Sales} - 100000) > 0 then ({@Total Sales} - 100000) * {RM00301.COMPRCNT} / 10000 else 0

Add these formula fields to the layout in the order indicated in the previous table.

9. **Indicate how records in the group will be sorted.**

To sort the sales for each salesperson, choose Record Sort Expert from the Report menu. In the Record Sort Order window, add the CUSTNAME field to the end of the sort fields list. This causes the customers listed for each salesperson to appear in sorted order.



Click OK to close the window.

10. **Preview the report.**

Choose Print Preview from the File menu to preview the report. Make changes to the layout of the report as needed.

## Sample 4: Source Posting Report

This report helps you reconcile General Ledger accounts for a particular period of time. You simply enter a range of dates and G/L Accounts. The report automatically sorts and totals by G/L Account, by Source document, and by day. This report is useful as proof that weekly cash receipts and sales are being properly deposited and accounted for.

### Report Name

Source Posting Report

### Physical Tables

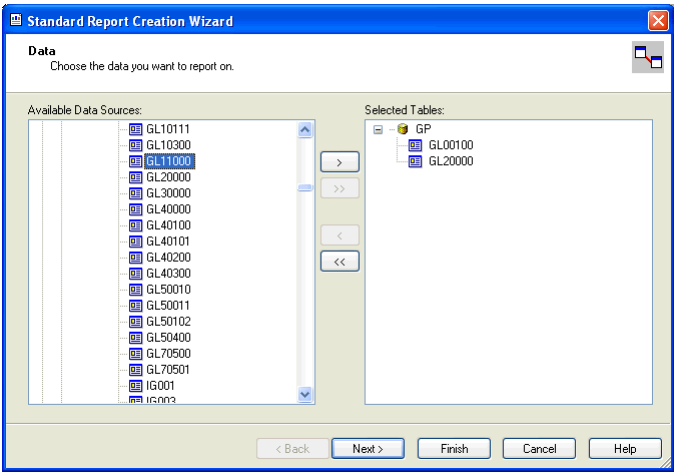
GL\_Account\_MSTR table (GL00100)

GL\_YTD\_TRX\_OPEN table (GL20000)

SOURCE POSTING REPORT						
3/23/2004						
Account Number	Original Master ID	Original Doc. No.	Date	Source Document	Debit	Credit
000-1100-00	SIGNATUR0001	20003	1/31/04	PMPAY	0.00	3,526.98
	INTERNAT0004	20004	1/31/04	PMPAY	0.00	35,323.87
	COMNETEN0001	20005	1/31/04	PMPAY	0.00	15,300.50
		20006	1/31/04	PMPAY	0.00	30.00
	GREENLAK0001	20007	1/31/04	PMPAY	0.00	11,125.88
	GKCLEANI0001	C117000	1/31/05	PMPAY	0.00	244.85
	WESTAMER0001	C119000	1/31/05	PMPAY	0.00	187.91
		C119001	1/31/05	PMPAY	0.00	18,790.78
Total Source:					<b>0.00</b>	<b>274,232.85</b>
000-1100-00	ASSOCIAT0001	A1000	1/31/04	PMTRX	0.00	2,633.92
	NESTATE0001	A1001	1/31/04	PMTRX	0.00	334.97
	INSTATET0001	A1002	1/31/04	PMTRX	0.00	106.84
	DOLECKIC0001	A1003	1/31/04	PMTRX	0.00	102.63
	MOSTATET0001	A1004	1/31/04	PMTRX	0.00	99.77
	BLOOMING0001	A1005	1/31/04	PMTRX	0.00	15.25
	INTERNAL0001	A1006	1/31/04	PMTRX	0.00	9,380.66
		A1007	1/31/04	PMTRX	0.00	17,692.16
		A1008	1/31/04	PMTRX	0.00	34.88
	ILSTATE0001	A1009	1/31/04	PMTRX	0.00	8.44
	AUTOFINA0001	120000	1/31/04	PMTRX	0.00	1,134.37
	ILSTATE0001	A1011	1/31/04	PMTRX	0.00	839.06
	INSTATET0001	A1012	1/31/04	PMTRX	0.00	103.91
	REVENUEC0001	A1013	1/31/04	PMTRX	0.00	431.56
		A1014	1/31/04	PMTRX	0.00	474.71
		A1015	1/31/04	PMTRX	0.00	258.93
		A1017	1/31/04	PMTRX	0.00	1,294.42
		A1018	1/31/04	PMTRX	0.00	330.44
		A1019	1/31/04	PMTRX	0.00	1,692.55
		A1020	1/31/04	PMTRX	0.00	1,510.45
		A1020A	1/31/04	PMTRX	0.00	8,934.16
	JIM STEWART	A1010	1/31/04	PMTRX	0.00	11,249.77
	ILSTATE0001	A1021	1/31/04	PMTRX	0.00	47,696.52
	CHICAGOC0001	A1022	1/31/04	PMTRX	0.00	7,949.42
	REVENUEC0001	A1023	1/31/04	PMTRX	0.00	5,370.97
	AUSTRALIA	A1024	1/31/04	PMTRX	0.00	10,645.07
	INLANDRE0001	A1025	1/31/04	PMTRX	0.00	2,129.01
	INTERNAL0001	A1026	1/31/04	PMTRX	0.00	107,870.20
	ILSTATE0001	A1027	1/31/04	PMTRX	0.00	32,361.06
	FCC	A1031	1/31/04	PMTRX	0.00	10,500.00
	WHITE	A1032	1/31/04	PMTRX	0.00	5,000.00
Total Source:					<b>0.00</b>	<b>208,192.10</b>
000-1100-00	AARONFIT0001		2/15/04	SJ	117.65	0.00
	PLAZAONE0001	INV 1022	5/30/05	SJ	812.99	0.00
Total Source:					<b>930.64</b>	<b>0.00</b>
000-1100-00	METROPOL0001	ORDST1015	5/28/04	SLSDF	500.00	0.00
	OFFICEDE0001	ORD1003	5/7/04	SLSDF	15,000.00	0.00
	VISIONIN0001	ORD1004	5/18/04	SLSDF	7,000.00	0.00
	CONTOSOL0001	BKO1001	5/10/04	SLSDF	5,500.00	0.00
Total Source:					<b>28,000.00</b>	<b>0.00</b>
Total Date:					<b>2,176,926.71</b>	<b>1,058,654.64</b>
Total Account:					<b>2,176,926.71</b>	<b>1,058,654.64</b>

To create the Source Posting report, do the following:

- 1. Create a new report.**  
Start Crystal Reports and choose New to create a new report.
- 2. Select a standard report.**  
In the Crystal Reports Gallery window, choose Standard. Click OK to continue.
- 3. Choose the tables to use for the report.**  
In the Standard Report Creation Wizard, select the tables that will be used for the report.

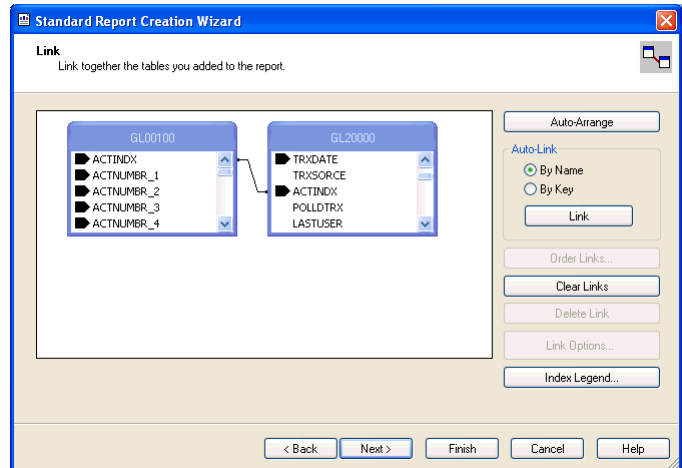


Select GL00100 (GL\_ACCOUNT\_MSTR) and then select GL20000 (GL\_YTD\_TRX\_OPEN) to add them to the Selected Tables list.

Click Next to specify how the tables are linked.

- 4. Link the two tables.**  
The Standard Report Creation Wizard will display the two tables you selected, allowing you to create a link between them. To link the two tables, do the following:
  - Scroll through both tables to find the common field, in this case ACTINDEX.

- If the link doesn't already exist, click on the ACTINDEX field in the GL00100 table and drag to the corresponding field in the GL20000 table.



Click Next to select the fields for the report.

### 5. Create formula fields for the report (if necessary).

To simplify creating the report, consider creating a formula field for the account number. This is described in the section titled [Composite](#) on page 12. This is described in the section titled [Date](#) on page 13.

### 6. Add fields to the report.

Add the following fields in the order specified.

Table	Fields	Column Heading
GL00100	Account Number (formula field)	GL Account
GL20000	ORMSTRID	Original Master ID
	ORDOCNUM	Original Document No.
	TRXDATE	Transaction Date
	SOURCDOC	Source Document
	DEBITAMT	Debit
	CRDTAMNT	Credit

Click Next to specify how the data will be grouped.

## 7. Specify how the data will be grouped.

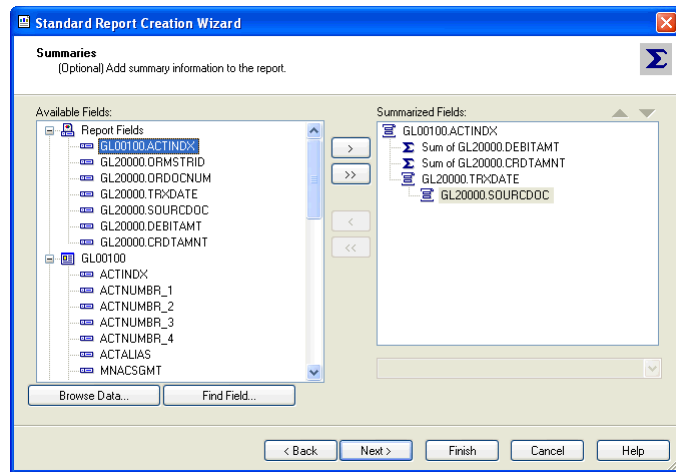
The data for the report should be grouped according to the account number, source document, and transaction date. Add the following fields to the Group By list, in this order:

- Account Number (formula field)
- GL20000.TRXDATE (formula field if using c-tree)
- GL20000.SOURCDOC

Click Next to specify how the groups are summarized.

## 8. Specify the fields that are summarized.

The GL20000.DEBITAMT and GL20000.CRDTAMNT fields should be totaled for the report. Be sure that only these fields appear in the Summarized Fields list.



Click Finish to complete the report.

## 9. Preview the report.

Click Preview Sample to preview the report. Make changes to the layout of the report as needed. To have the best appearance for the report, consider hiding the group headers for the three groups in the report.



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