Table Of Contents

OVERVIEW

To use ODBC, you must install the BASIS ODBC Drivers on a Microsoft Windows 95, Windows 98, Windows NT, or Windows 2000 machine.

If your OSAS data is stored on a UNIX or LINUX drive, you will need software to map those drives as DOS drives or use a data server to access the OSAS data.

After you install the ODBC drivers under Windows, you can use it to access your OSAS data, produce reports, and import OSAS data into other applications.

This course covers using ODBC with Excel. You will walk through examples of using Microsoft Query and creating PivotTables and spreadsheets in Microsoft Excel.

Before you can access the OSAS data using Microsoft Excel, you must set up any custom files, fields, and indexes using the OSAS ODBC Kit. You must also create a configuration file using the Edit CONFIG.TPM function or a text editor and install the BASIS ODBC Drivers in Windows.

Set up in OSAS

Files[1]

Use the Files function to set up and maintain data dictionary information about the data files used in OSAS programs, to construct views of the OSAS data files, and to delete unnecessary file definitions from the data dictionary

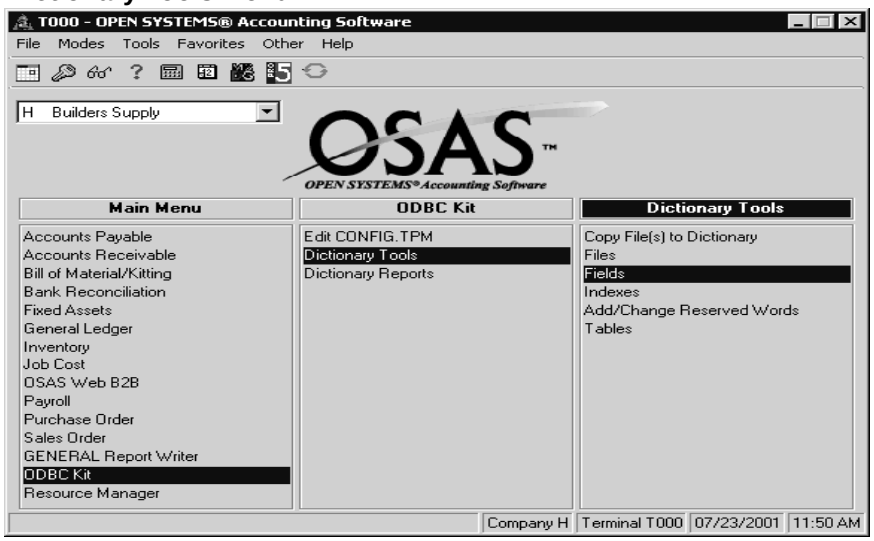
Dictionary Tools Menu - Files

1.For detail information on the Files function see the ODBC Kit Training Guide

Fields[2]

Use the **Fields** function to define and edit the fields in the data dictionary files.

Dictionary Tools Menu

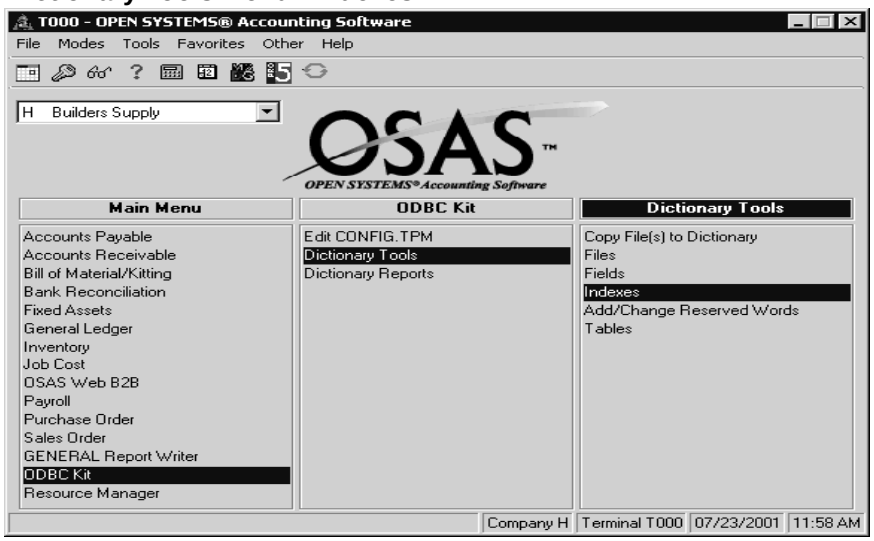


2.For detail information on the Fields function see the ODBC Kit Training Guide

Indexes[3]

Use the **Indexes** function to define the keys used in OSAS Mkeyed data files.

Dictionary Tools Menu - Indexes



3.For detail information on the Indexes function see the ODBC Kit Training Guide

Copy File(s) To Dictionary[4]

Use the **Copy File(s) To Dictionary** function to copy file, field, and index definitions from one set of data dictionaries to another; to create a copy of a data dictionary file name; and to rebuild the base tables.

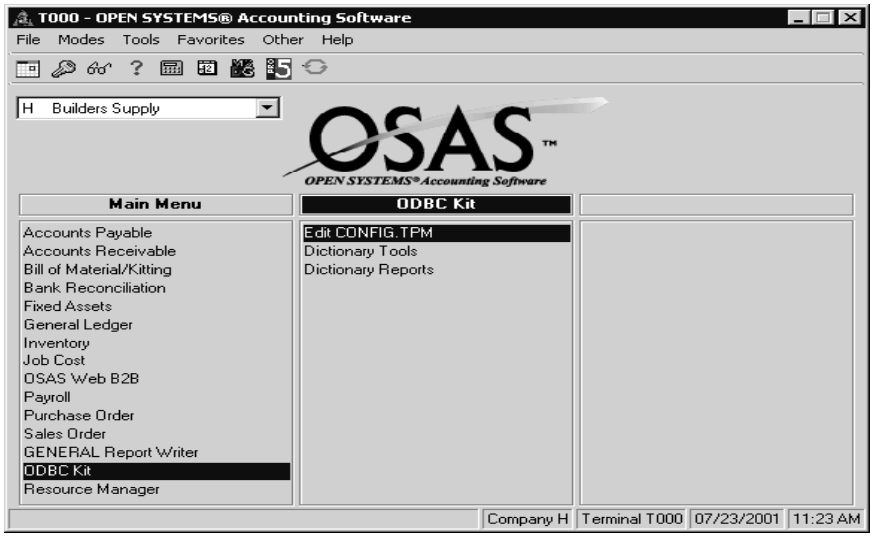
Dictionary Tools Menu - Copy File(s) To Dictionary

4.For detail information on the Copy File(s) To Dictionary function see the ODBC Kit Training Guide

Edit CONFIG.TPM

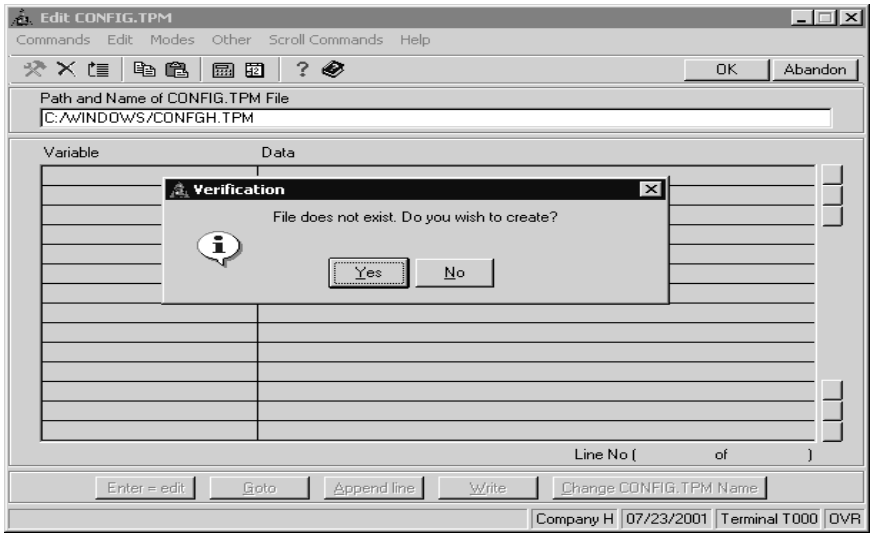
Use the **Edit CONFIG.TPM** function to create and edit database configuration files for use with the BASIS ODBC Driver.

ODBC Kit Main Menu – Edit CONFIG.TPM



Select **Edit CONFIG.TPM** from the ODBC Kit menu.

Edit CONFIG.TPM Selection Screen

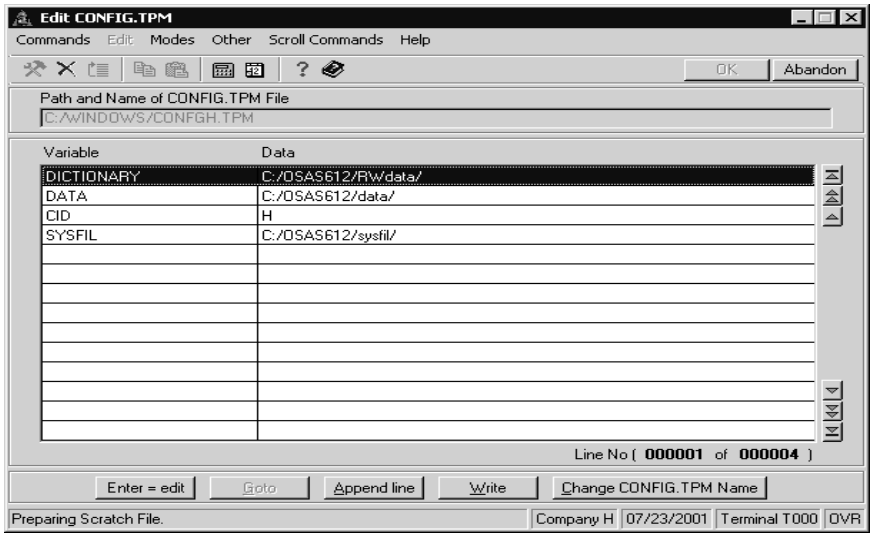


To create a configuration file make the following selections:

Selection	Description
Path and Name of CONFIG.TPM File	Enter the path and TPM file name to create. The path defaults to the C:/WINDOWS. You can accept this path and enter in the configuration file name[1] or you can type in your own path and configuration file name.
File does not exist. Do you with to create?	Select **Yes** to create the configuration file in the selected path. Select **No** if you do not want to create the configuration file entered.

1. The configuration file does not have to have the name CONFIG.TPM. The file is an 8.3 Dos file and is only required to have the TPM extension, but can have any name you want.

Edit CONFIG.TPM Selection Screen



Variable	Data
DICTIONARY[1]	The path to the ODBC data dictionaries. The default path is the RWdata directory setup with the Directories function in Resource Manager.
DATA[1]	The path to the OSAS data. The default path is the Data1 directory setup with the Directories function in Resource Manager.
CID	The company ID. The company you are in defaults as the company ID
SYSFIL[1]	The path to the OSAS systems files. The default path is the SYSFIL directory setup with the Dictionary function in Resource Manager.

1. The path entered must contain a drive letter and colon for the BASIS ODBC Drivers to access the OSAS data properly, unless you are using a data server. If you are using a UNIX or LINUX system and not using a data server, do not create a configuration file here (See Appendix C).

You can edit the configuration file by selecting the following:

Command	Action
Enter = edit	**Enter** to edit the line next to the cursor.
Append Line	Select **A** to add a line to the configuration file.

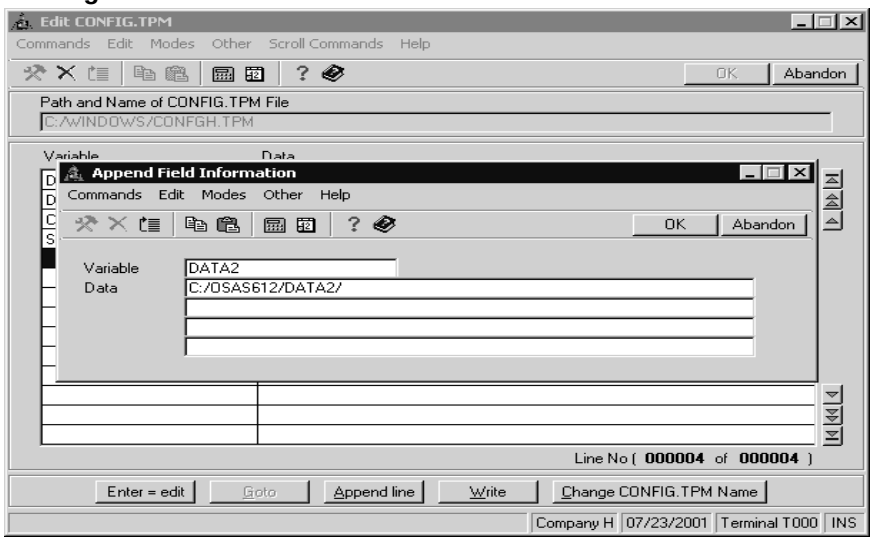
Note

You must create a separate database configuration file for each company you want to access with the ODBC driver.

Adding Variables[5]

If you have OSAS data stored in the DATA2 or DATA3 paths, or you would like to access General Ledger data from previous years or last years Payroll data, use the Append option to add variables to the configuration file for those options.

Adding DATA 2 Variable



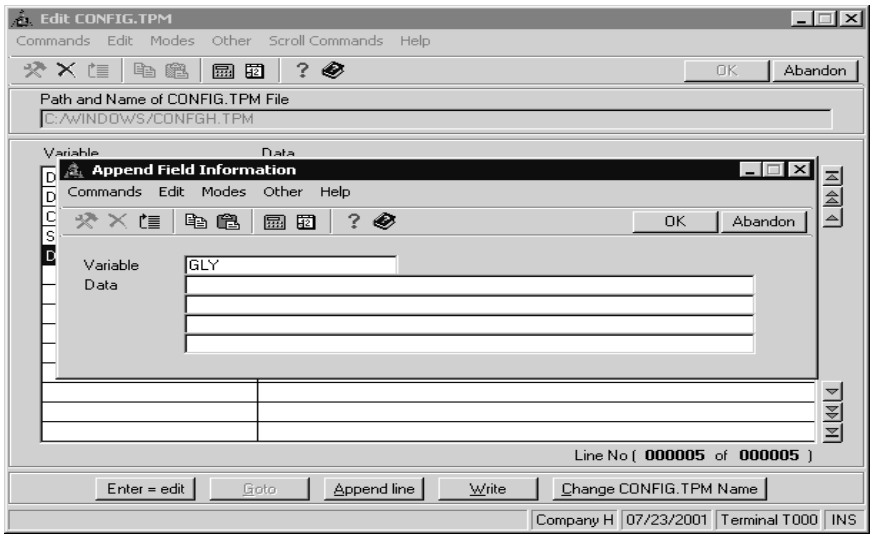
Field	Description
Variable	Enter the name of the variable you want to add to the configuration file. Add the variable name to the ODBC path in the Files function.
Data	Enter any line data you need to associate with the current variable. If the variable represents a directory, make sure to end the path with a "/".

Use the **Proceed** command, **PgDn** or **Esc P**, to save the variable.

5.For more information on adding variables see the ODBC Kit Training Guide.

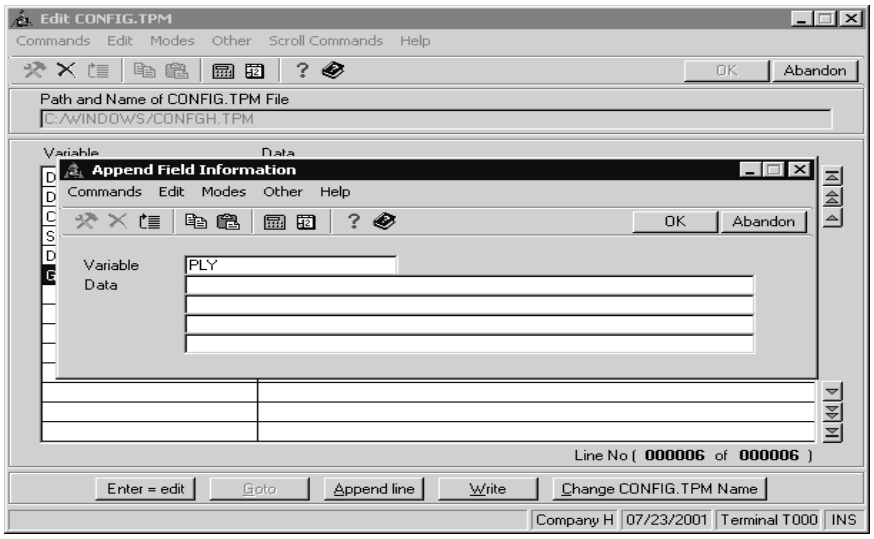
In 6.1 and higher the variables for previous year General Ledger files and Last Year Payroll file are already added to the data dictionary files. To access those data files you must add the variables to the configuration file[6].

Current Year GLY Variable



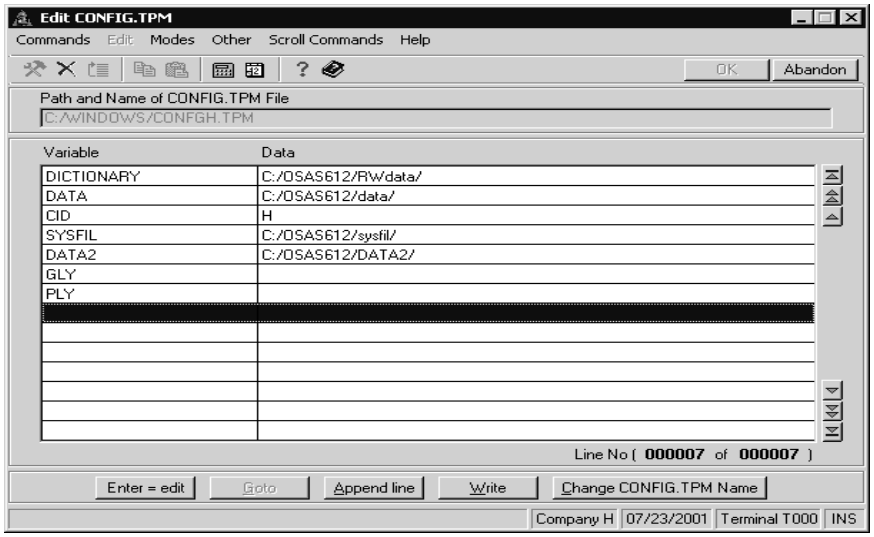
For complete details on the GLY and PLY variables see Appendix D

Current Year PLY Variable



6. If you are using a version before 6.1 you will have to add the variables to the configuration file AND to the data dictionary files through the Files function.

Edit CONFIG.TPM Selection Screen



Command	Action
Write	Select **W** to write the configuration file. Select **Y**, for Yes, to save the changes made to the configuration file. Select **N**, for No, if you do not want to save the changes made or the configuration file.
CONFIG.TPM Name	Select **C** to enter the path and file name for a new configuration file.

Note

If you are using the 1.1 BASIS ODBC Drivers you must also run the Build Shadow Dictionary function (See Appendix A).

Setup In Windows

To use ODBC, you must install and register the BASIS ODBC Drivers on a system with Microsoft Windows 95, Windows 98, Windows NT, or Windows 2000.

See ODBC Kit users guide for installation instructions.

Using ODBC w/Excel

Microsoft Query

This section walks you through creating a query using the ODBC Kit and Microsoft Query 2000.

Microsoft Excel uses Microsoft Query in the background to select and import data with the BASIS ODBC Driver.

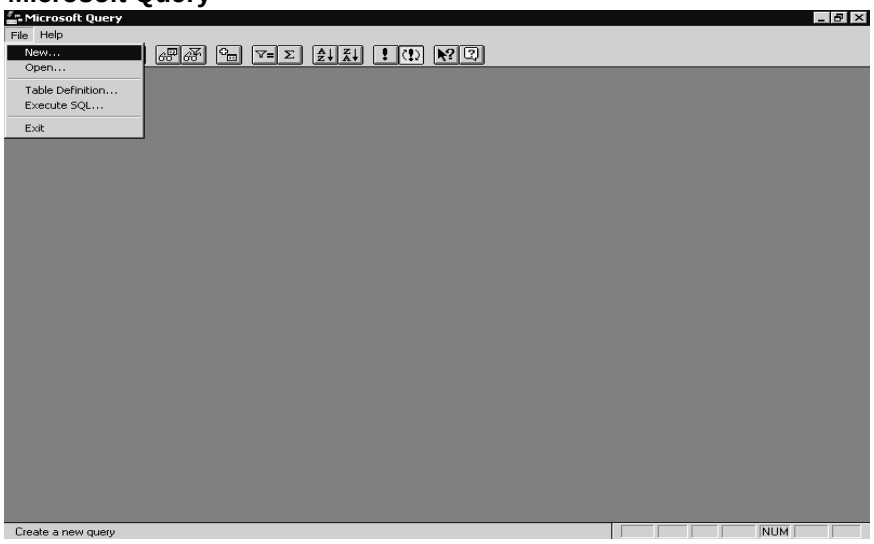
Creating a Query

Normally a short cut for Microsoft Query is not created on the Start Menu or the desktop.

To start Query, Click the Start Button and select Run. Browse to the Msqry32.exe program. The default path is “Program Files\Microsoft Office\Office\Msqry32.exe”.

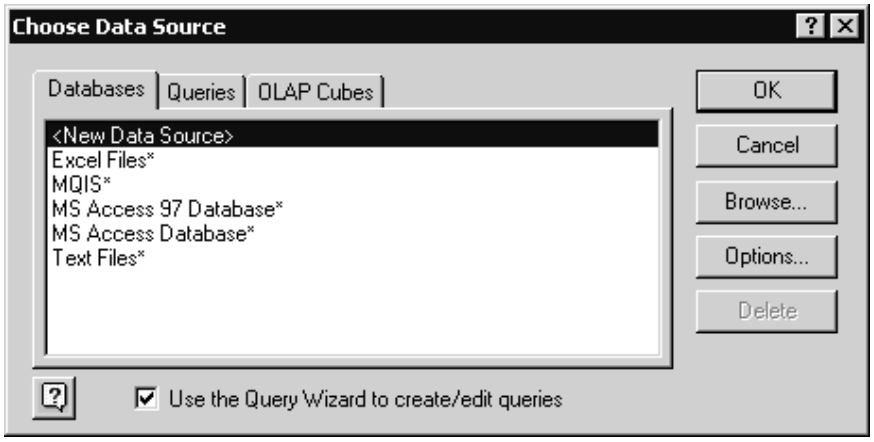
You can use Find from the Start Menu to search for Msqry32.exe

Microsoft Query



Select New from the File menu.

Choose Data Source Screen

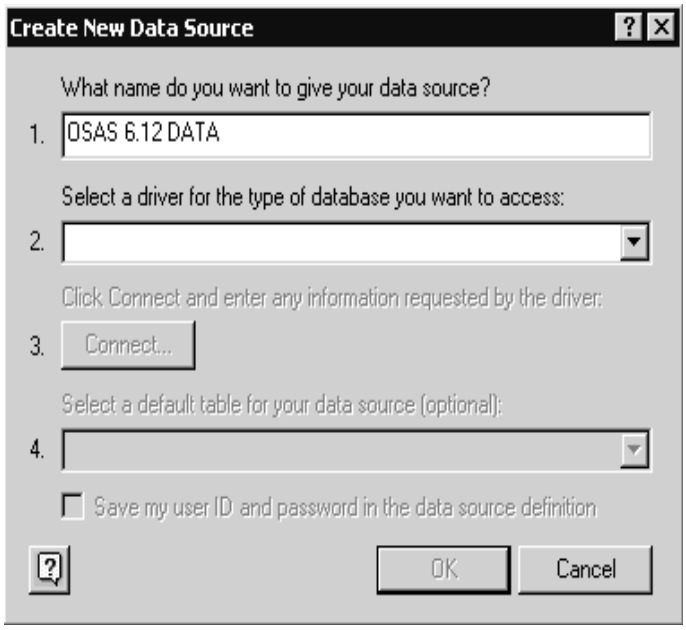


The Choose Data Source screen is displayed.

Select the data source you want to use for this query or choose <New Data Source> if the one you want to use is not listed.

For this query highlight <New Data Source> and select the OK button.

Create New Data Source Screen - Step 1

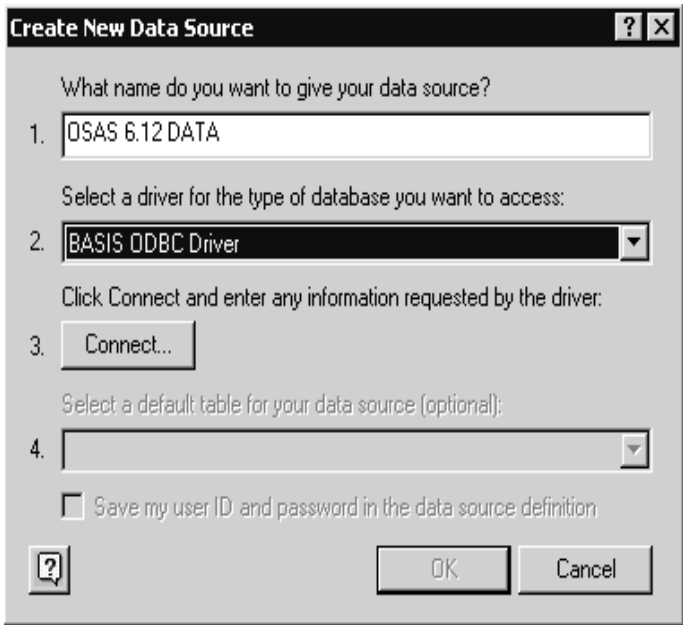


The Create New Data Source screen is displayed.

There are four steps in creating a data source.

1. Enter a name for the data source you are creating. You can use any name for your data source.

Create New Data Source Screen - Step 2

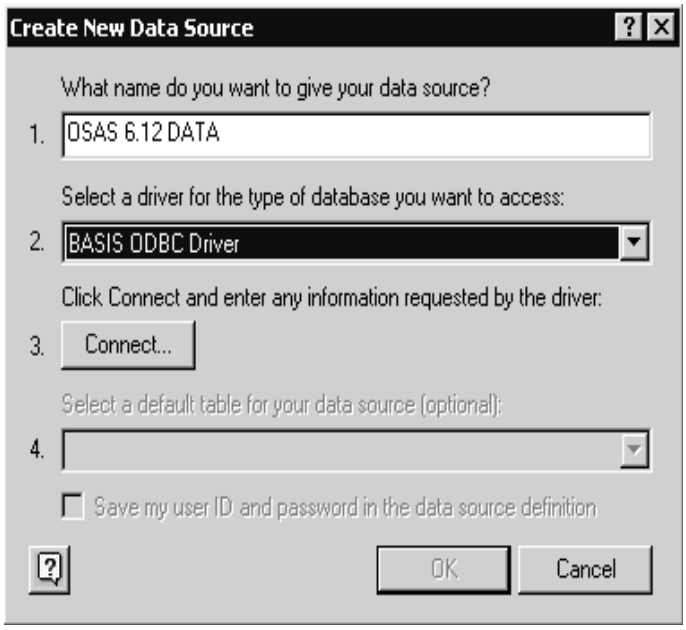


2. Select the driver for the database you want to access.

   For the OSAS data files, select the BASIS ODBC Driver[3].

3. If you are using the 1.1 version of the ODBC Drivers, select BASIS ODBC Driver 32-Bit.

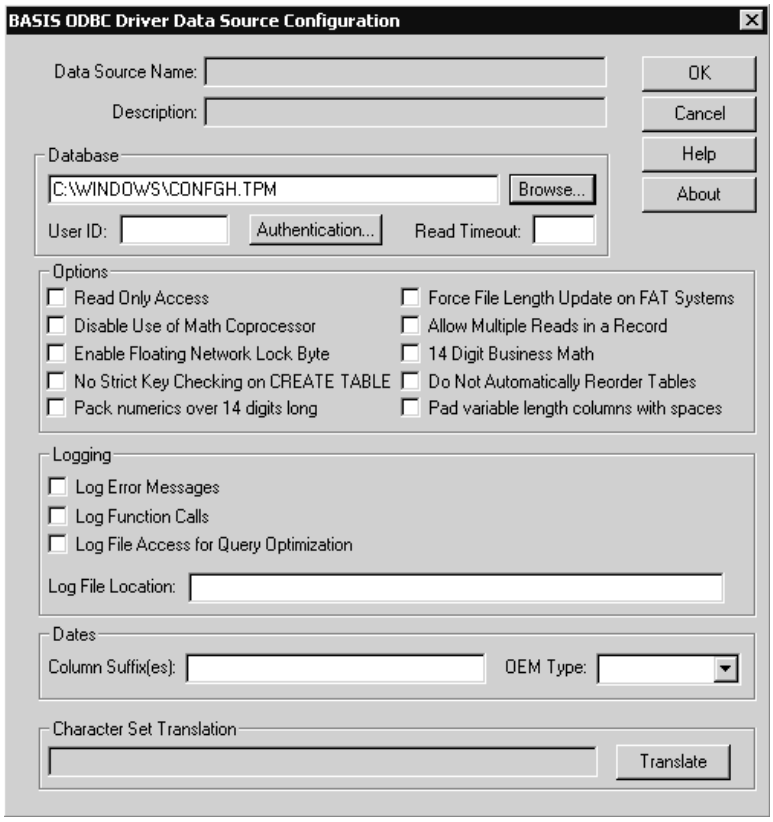
Create New Data Source Screen - Step 3



3. Connect to the data source configuration file.

   Click the Connect button.

BASIS ODBC Driver Data Source Configuration Screen

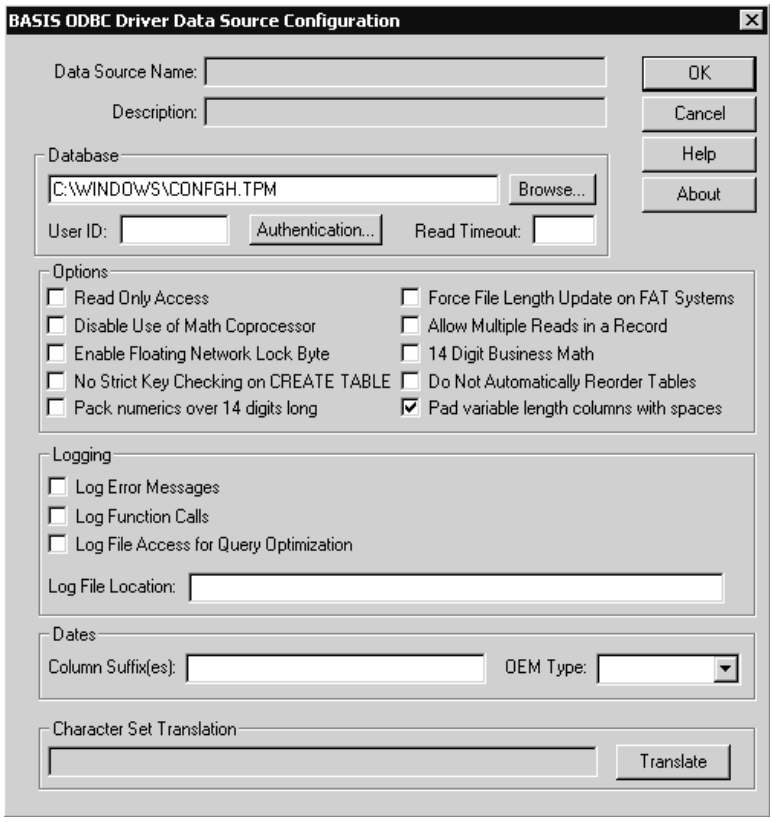


The BASIS ODBC Driver Data Source Configuration screen is displayed.

1. Enter the path to the configuration file created in OSAS with the EDIT CONFIG.TPM function.

   The Browse buttons is available to find the configuration file.

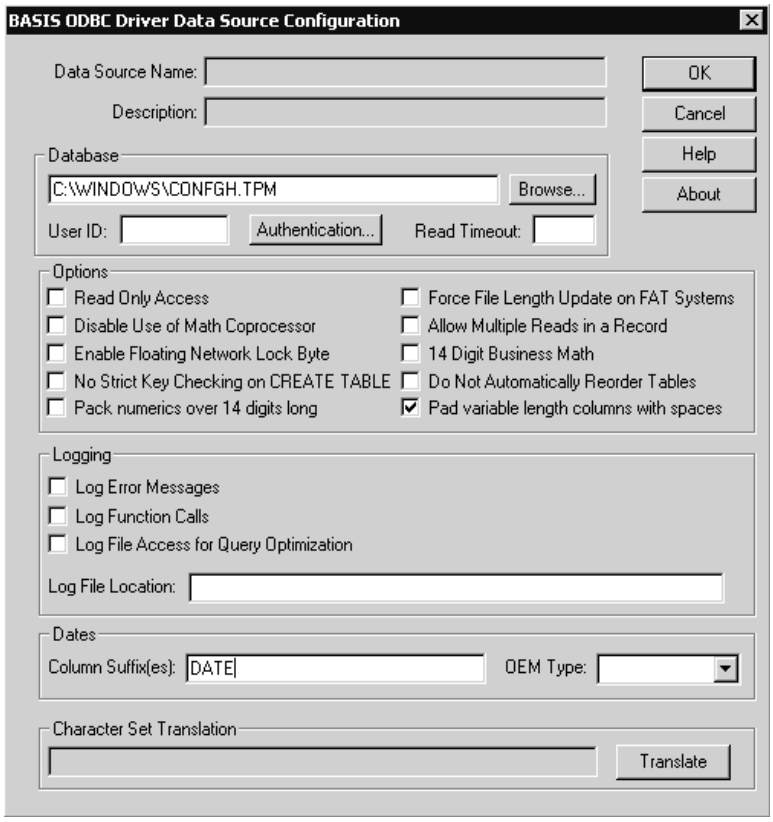
BASIS ODBC Driver Data Source Configuration Screen



2. Under Options, make sure to place a check next to Pad variable length columns with spaces[4].

4. This option is used if you have the Read/Write version of the BASIS ODBC Driver. Microsoft Query can write back to the OSAS data files, but Excel cannot.

BASIS ODBC Driver Data Source Setup Screen



3. Under Dates in the Column Suffix(es) field, type in the word your OSAS Julian data fields end with. This will convert the OSAS Julian Date fields to display as regular dates.

   For standard OSAS data files enter DAT, DATE.[5]

Note

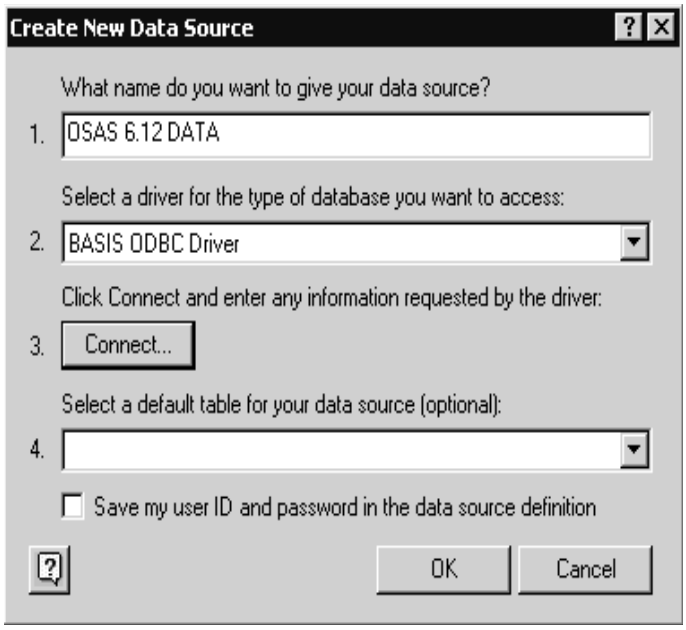
If you are using Data Server you must also enter a valid user in the Network User ID field. Root, Administrator, Admin and Supervisor are not acceptable to use with ODBC.

Click the OK button after the options have been checked, and if necessary, the Network User ID has been entered.

See Appendix E for detail information on the BASIS ODBC Driver Data Source Setup.

5.Most Julian Date fields in OSAS end with the word DATE but in some installations the fields end with DAT.

Create New Data Source – Step 4



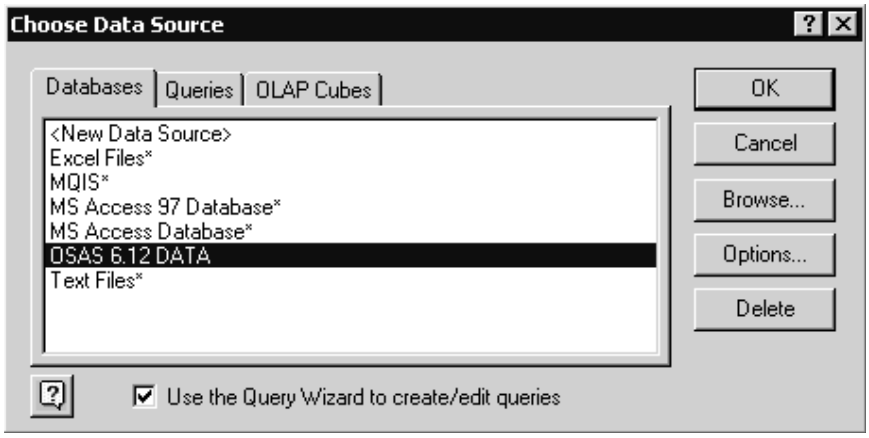
The Create New Data Screen is re-displayed.

4. Select an optional table (file) for your data source. This table is selected by default when you use this data source, but you can always select any table available.

   You can also save your user ID and Password with this data source.

Click OK when finished.

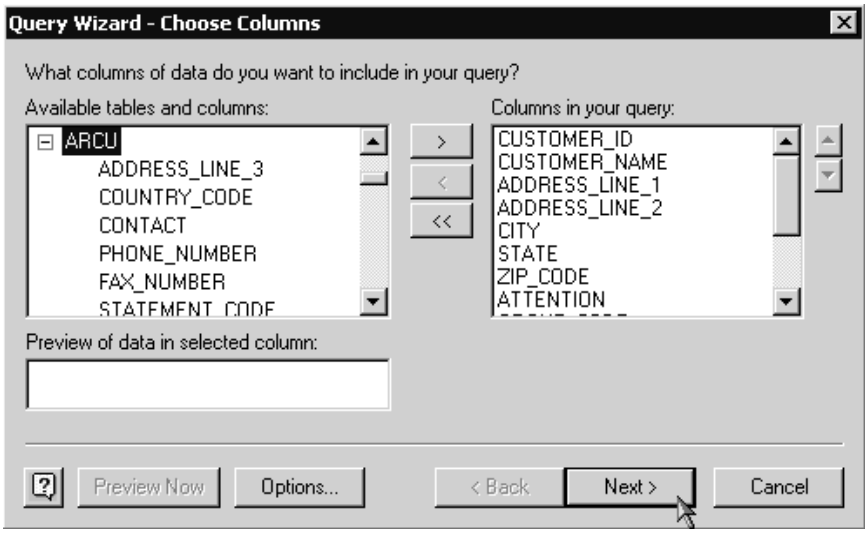
Choose Data Source Screen



The Choose Data Source screen is re-displayed.

Place a check in the Use the Query Wizard to create/edit queries field, highlight the data source created and click OK.

Query Wizard – Choose Columns Screen



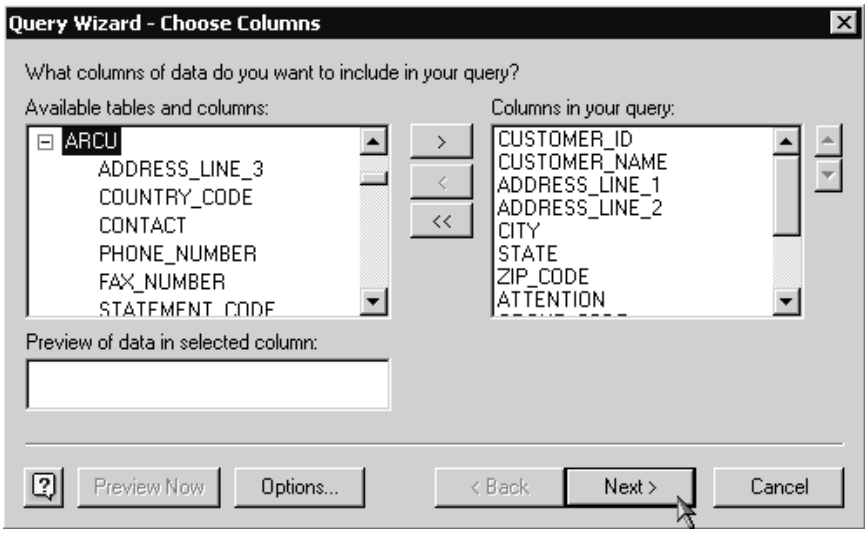
The Query Wizard – Choose Columns screen is displayed.

Select the tables and columns (files and fields) you want to use in your query.

Field	Description
Available tables and columns	Displays a list of available tables and columns in the selected data source. Select the files and the fields to include in the query. Click the + next to the file name to expand the file and display all the fields within that file. To add a field to the query, highlight the field name and Click >. To add all the fields highlight the file name and Click >[1]. ***For this query select the ARCU table.***
Columns in your query	Displays the fields select for this query. To remove a field, highlight the field and Click <. To remove all the fields, Click << To change the order of the fields, highlight a field and select the up or down arrows to move the field. ***Select the CUSTOMER_ID, CUSTOMER_ANME, ADDRESS_LINE_1, ADDRESS_LINE_2, CITY, STATE, ZIPA_CODE, ATTENTION, GROUP_CODE, CUSTOMER_LEVEL, SALES_REP_ID_1, SALES_PTD, SALES_QTD and SALES_YTD fields from the ARCU table.***
Preview of data in selected column[2]	Displays the data in the highlighted field under Columns in your query or Available tables and columns when you Click the Preview Now button.
Options	Select if you want to choose from Tables, Views, System Tables and Synonyms in the Available tables field. You can also select to sort the column and table names in alphabetical order.

1. You can also double click the field names or the file name to add them to your query.
2. This option does not work with the 2.3 and 3.0 BASIS ODBC Drivers.

Query Wizard – Choose Columns Screen

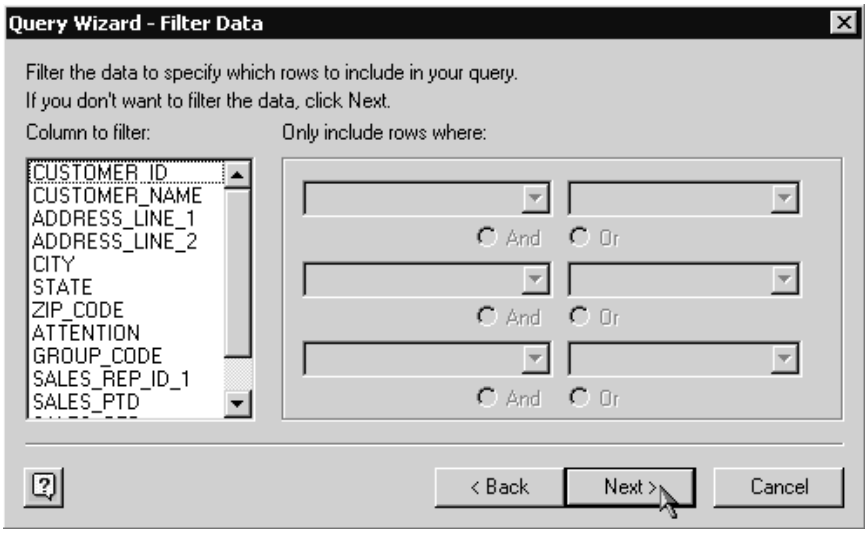


Command	Action
Preview Now[1]	Click to preview the data, of any highlighted field in Columns in your query or Available tables and columns, in the Preview of data in selected column field.
Back	Not available in the Choose columns step.
Next	Click to proceed to the next step of the query wizard.
Cancel	Click to exit the query wizard.

1. This option does not work with the 2.3 or 3.0 BASIS ODBC Drivers.

Click the **Next** button to continue creating the query.

Query Wizard – Filter Data Screen



The Query Wizard – Filter Data screen is displayed.

Select the fields on which you want to impose criteria.

Field	Description
Column to filter	Select the fields on which you want to impose criteria.
Only include rows where – box 1	Select the operator for the criteria. Use the combo button to select from a list of available operators.
Only include rows where – box 2[1]	Enter the expression to compare against the field. You can use the combo button to select from the data stored in the OSAS files.

1. With the 2.3 and 3.0 BASIS ODBC Drivers you must manually type in the value to filter the data with.

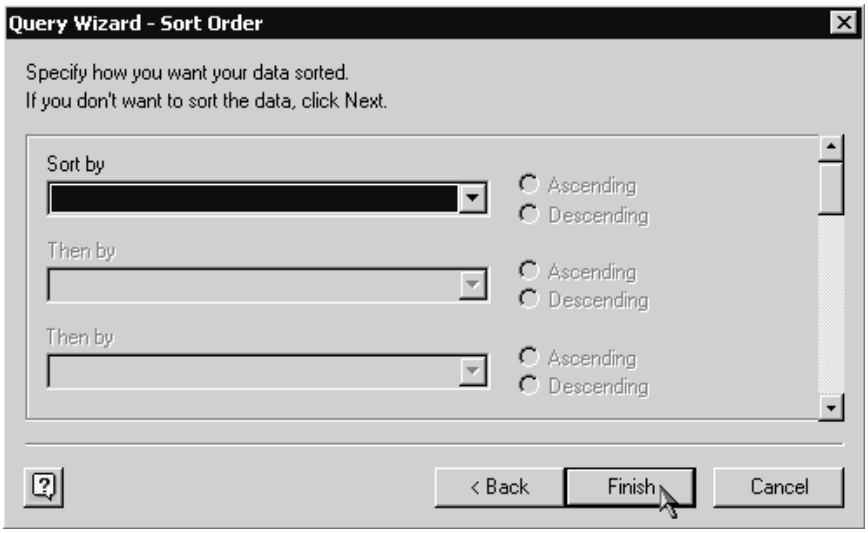
You can create filters for any of the fields selected for your query.

Filter data is an optional function.

Command	Action
Back	Select to return to the previous step of the query wizard.
Next	Click to proceed to the next step of the query wizard.
Cancel	Click to exit the query wizard.

Click the **Next** button.

Query Wizard – Sort Order Screen



The Query Wizard – Sort Order screen is displayed.

Select the fields by which you want to sort the query and the sort order.

Field	Description
Sort by	Select the first field to sort by.
Then by	Select additional fields to sort by. This will create sorts within sorts on your query.
Ascending Descending	If a sort is selected, select the sort order. Ascending order is A to Z, lowest to highest. Descending order is Z to A, highest to lowest.

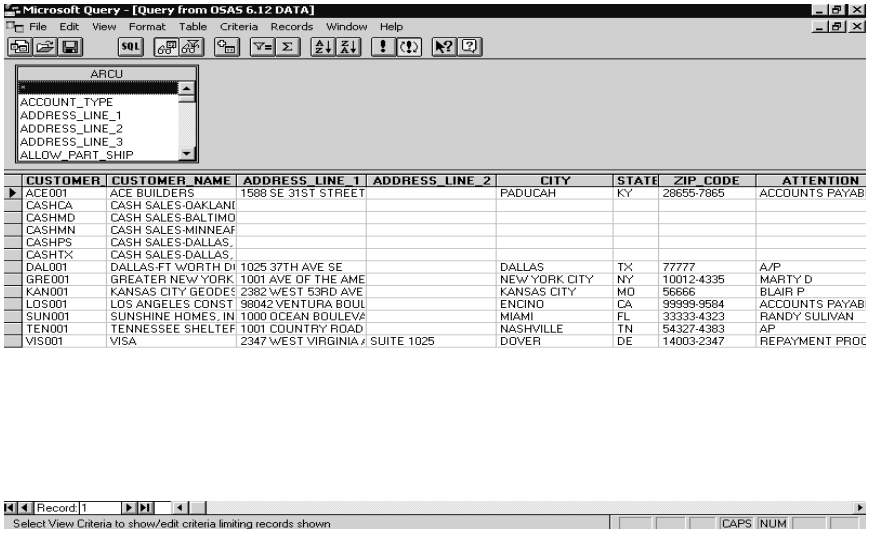
You can sort by any of the selected fields for your query.

Sort Order is an optional function.

Command	Action
Back	Select to return to the previous step of the query wizard.
Finish	Click to exit the query wizard and create the query.
Cancel	Click to exit the query wizard.

Click **Finish**.

Query 1 – ARCU Table



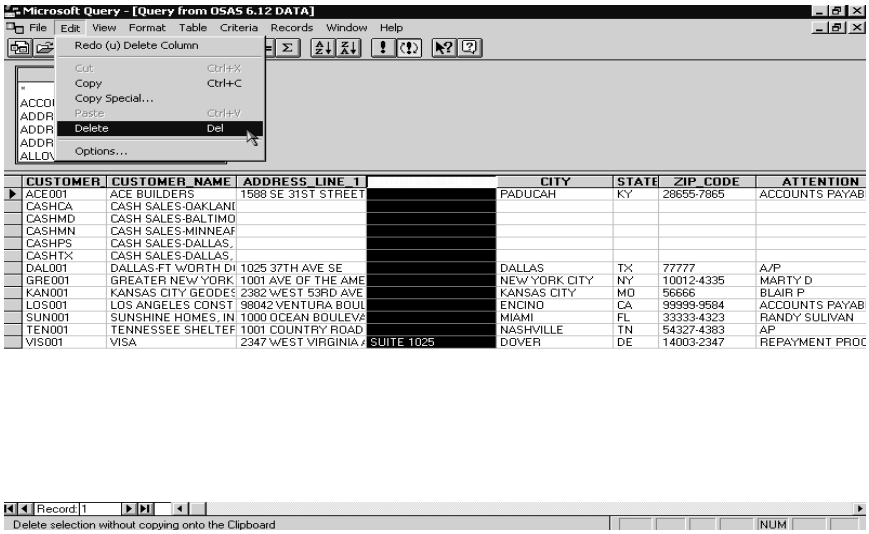
The query is displayed.

The top section of the query displays the tables (files) used to create the query.

The bottom section shows the data contained in the columns (fields) of the query.

Deleting Columns

Query 1 – Deleting Columns

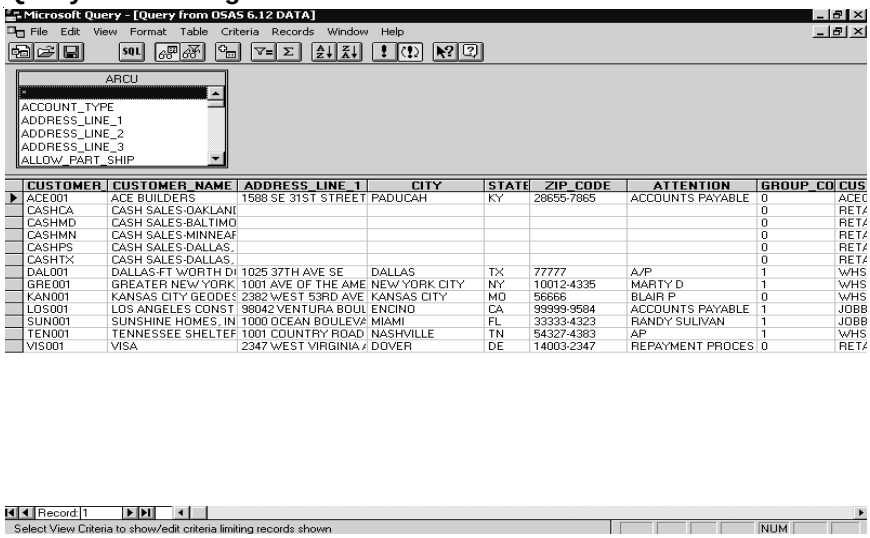


To delete a column, from the query, perform the following.

Select the column to delete.

Select Delete from the Edit menu or press the Delete key.

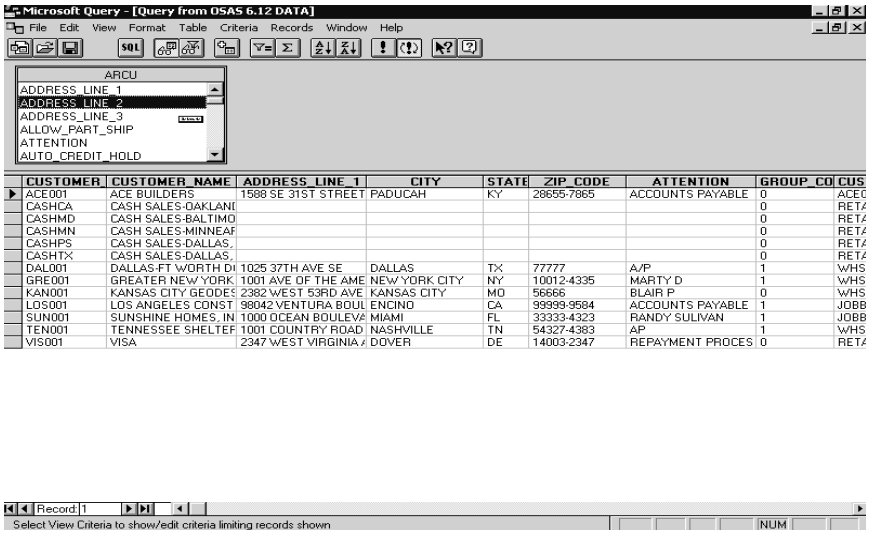
Query 1 – Deleting Columns



The Column is deleted.

Adding Columns

Query 1 – Adding Columns

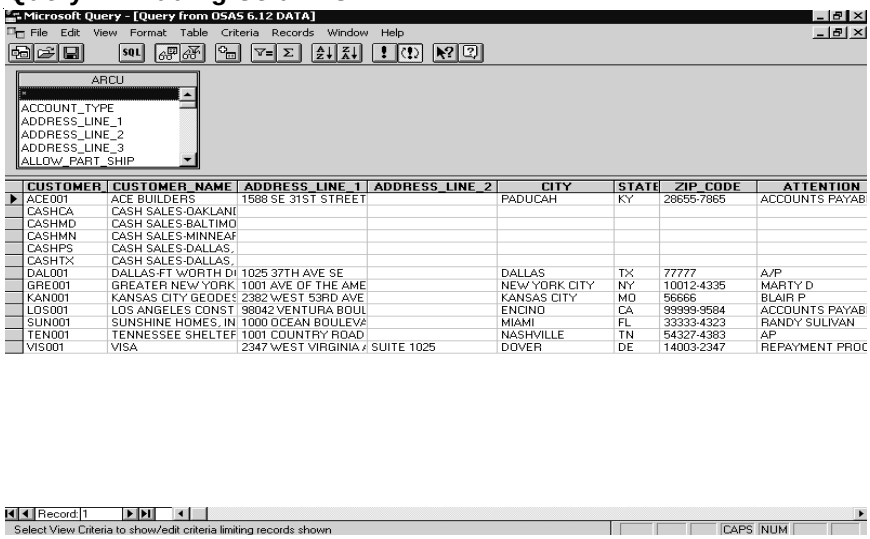


To add a column, to the query, perform the following.

Select the column you want to add from the table.

Drag and drop the select column in the position you want it to appear in on the query or double click to add it to the end of the query.

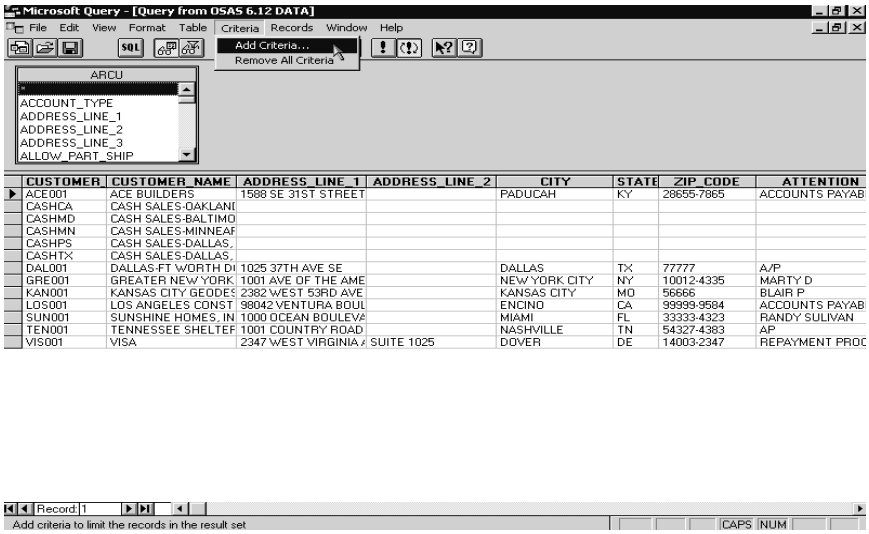
Query 1 – Adding Columns



The Column is added.

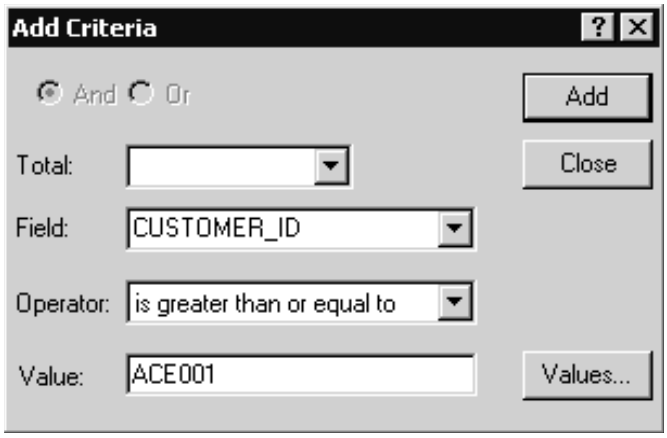
Adding Criteria

Query 1 – Adding Criteria



To filter the data in the query, select Add Criteria from the Criteria menu.

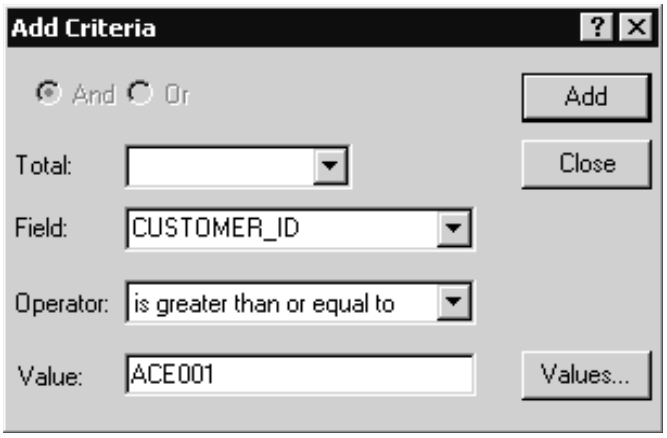
Add Criteria



The Add Criteria box is displayed. Enter the following:

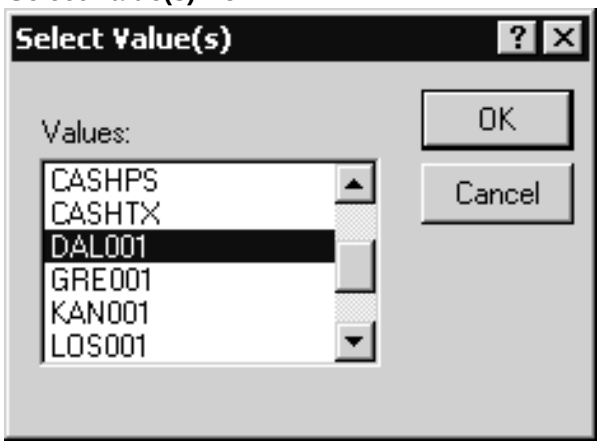
Field	Description
And/Or	If you are adding multiple criteria fields, select how the filters are connected. These fields are not available on the first criteria field.
Total	Select the type of subtotal, if any, you want on the field.
Field	Select the field to establish criteria on
Operator	Select how you want to compare the Field to the Value

Add Criteria



Field	Description
Value	Select the values to limit the field with.
Add	Click to add criteria to the query
Close	Click to close the Add Criteria box
Values	Click to select the Value field from a list.

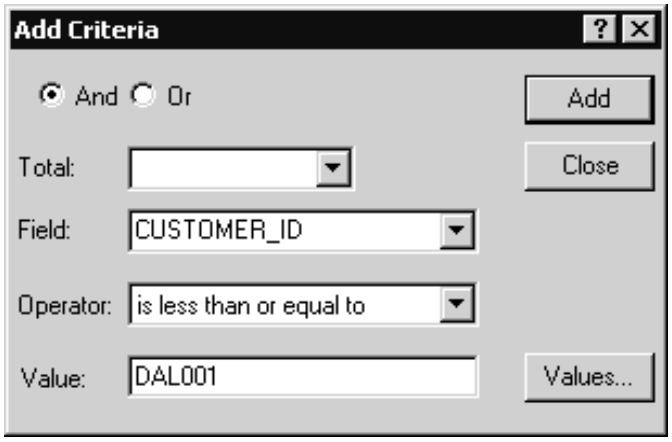
Select Value(s) Box



The OSAS data stored in the select field is displayed when you click the Values button.

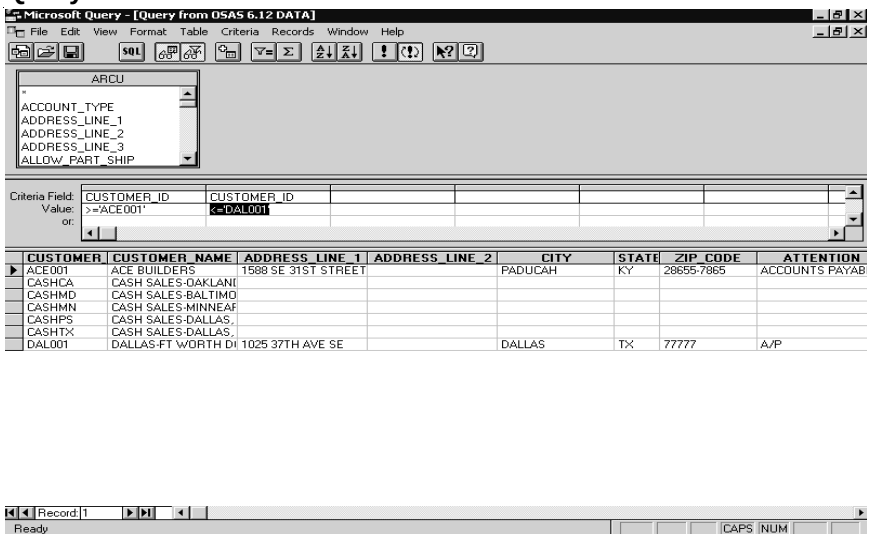
Select the value you want to use in the criteria and click the OK button.

Add Criteria



The selection is added to the Value field.

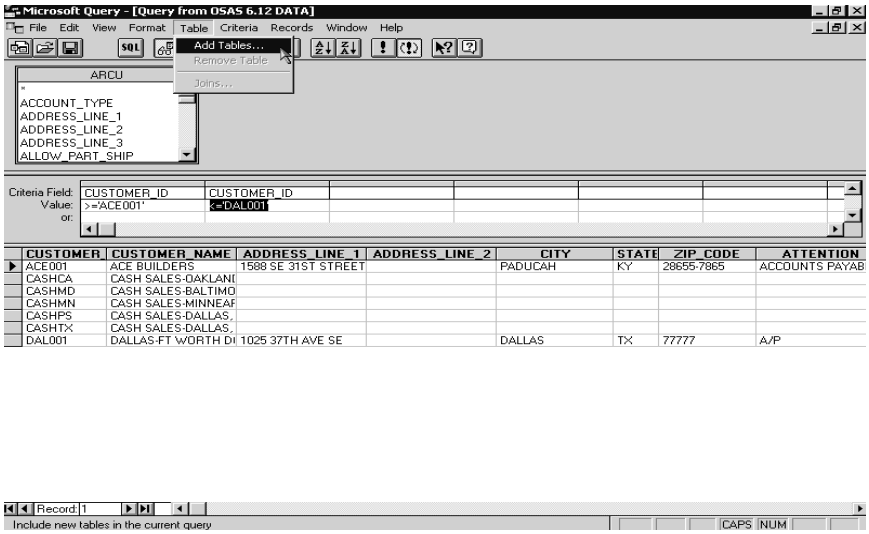
Query 1



The added criteria are displayed in the middle area of the query and the data is filtered.

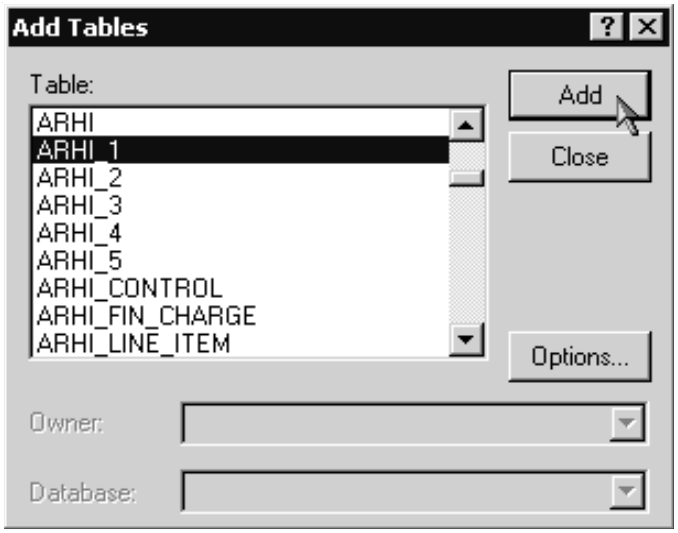
Adding Tables - Automatic Join

Query 1 – Add Tables



To add a table to the query select Add Table from the Table menu.

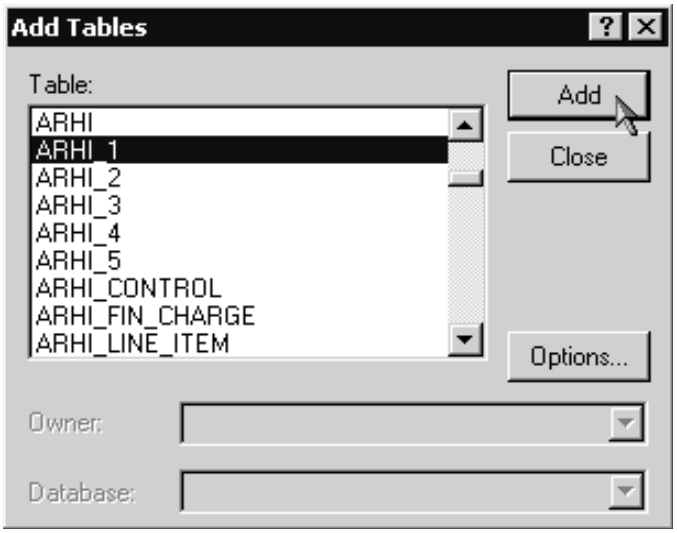
Add Tables



The Add Tables box is displayed.

Field	Description
Table	Displays the list of available tables (files) in your data source. Select the table(s) you wan to add to the query.
Owner	If you want the Tables box to only display tables created by a specific owner, select the name here. This field is available depending on the data source used to create the query.

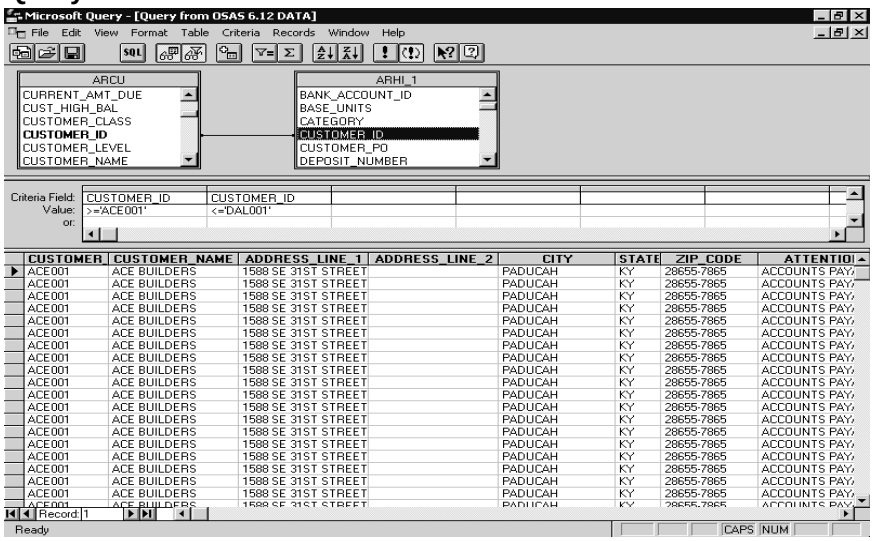
Add Tables.



Field	Description
Database	Select the database or location where the tables you want are stored. This field is available depending on the data source used to create the query.
Add	Select to add the highlighted table to the query.
Close	Select to close the Add Tables box after all the tables have been added to the query.
Options	Select if you want to choose from Tables, Views, System Tables and Synonyms in the Available tables field. You can also select to sort the column and table names in alphabetical order.

Select the ARHI_1 table and click the Add button.

Query 1 - Table Added



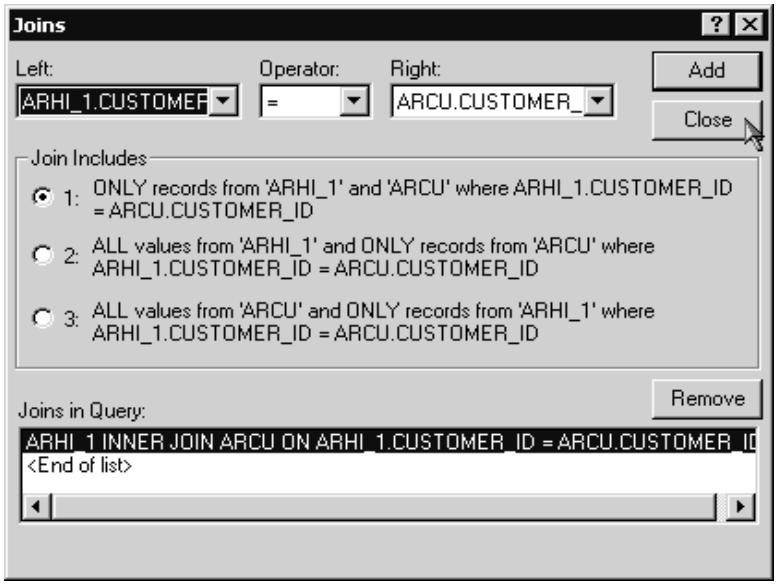
The table is added to the query.

If the tables have a field in common, Microsoft Query will create a link or join between the tables automatically.

The query creates a row for every record in the second table, per record in the first table.

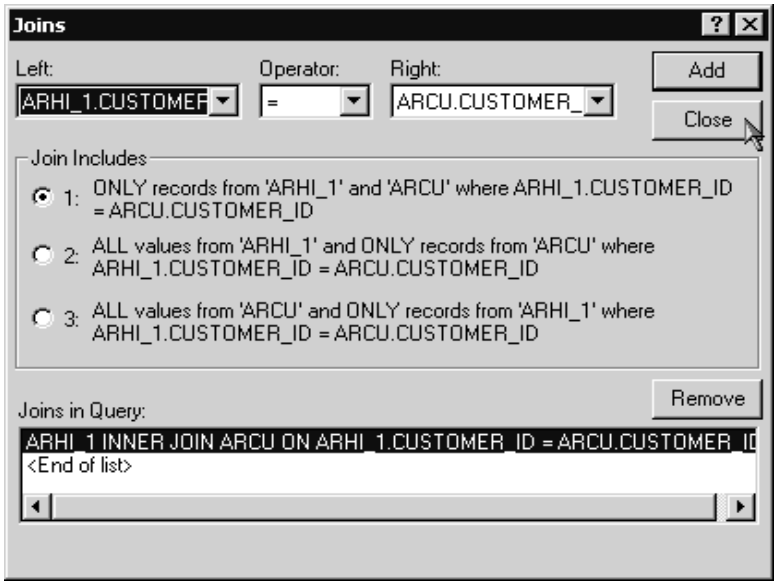
In this example there is a row for every record in the ARHI_1 file per customer from the ARCU file, even though the data on the query is only from the ARCU file.

Joins



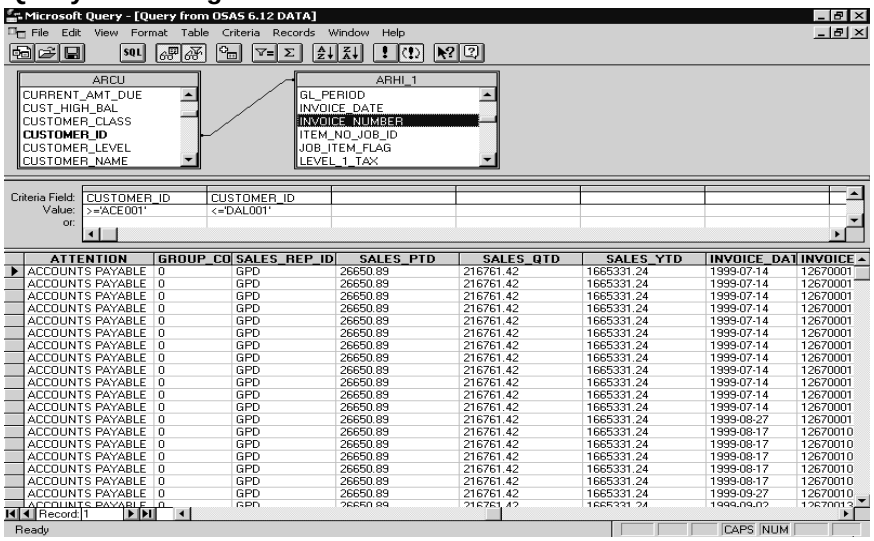
Select Joins from the Table menu or double click on the join between the tables to see how the tables are linked together.

Joins



Field	Description
Left	Select the table and field you want on the left side of the join line. If the join is created automatically, Microsoft Query will select the table and field for this side.
Operator	Select the comparison operator for the values in the Left and Right fields.
Right	Select the table and field you want on the right side of the join line. If the join is created automatically, Microsoft Query will select the table and field for this side.
Join Includes	Select the join option that specifies which records you want to retrieve and under what condition, based on the operator. The option you select determines if you have an inner or outer join type. An inner join returns related records from both tables. An outer join returns all records from one table and related records from the other table.
Joins in Query	Displays statements defining the existing join types in the active query. If you have more than one join, Microsoft Query displays a separate statement for each.
Add	Adds the join line between two tables in query. The Joins dialog box remains open so you can add more joins, if necessary.
Cancel/Close	The Cancel button closes this dialog box without applying any changes you have made. The Close button closes this dialog box and retains the changes you made.
Remove	Removes the join statement you've selected in the Joins in query box. Removing the join also removes the join line between the two tables in the query.

Query 1 - Adding Columns from Table 2



To add columns from the additional table(s), drag the fields from the table and drop in the desired position in the query or double click the fields to add them to the end of the query.

Add the Invoice Date and Invoice Number fields to the query.

Adding Criteria

When you have more than one table in the query the criteria is added by table and field ID

Select And to add the new criteria and leave Total blank

In Field select the ARHI_1.RECORD_TYPE.

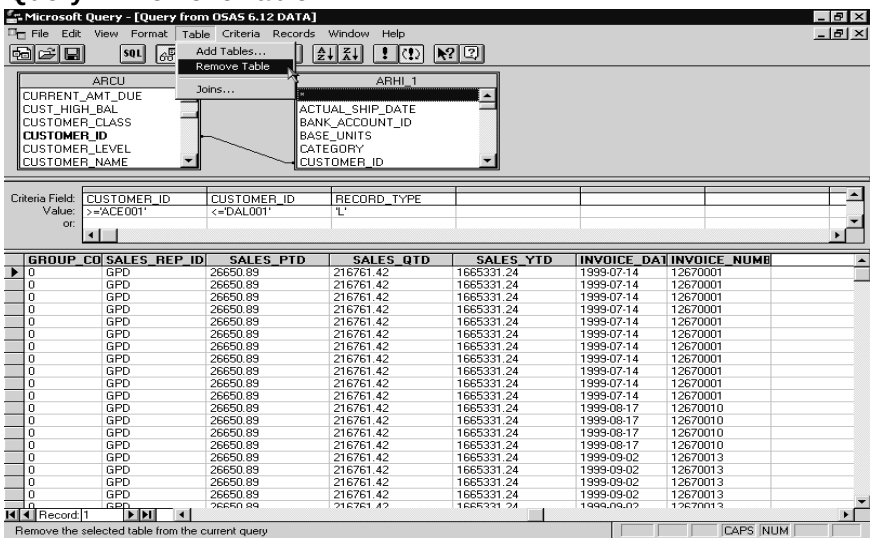
In Operator select equals

In Value select L and click the Add button.

Close the criteria box.

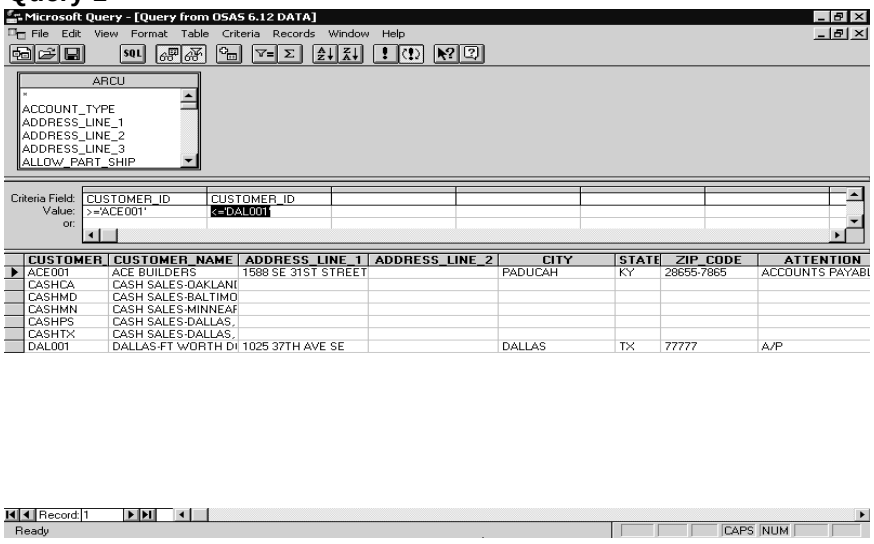
Removing Tables

Query 1 - Remove Table



To remove a table from the query, highlight any field within the table you want to remove and select Remove Table from the Table menu.

Query 1

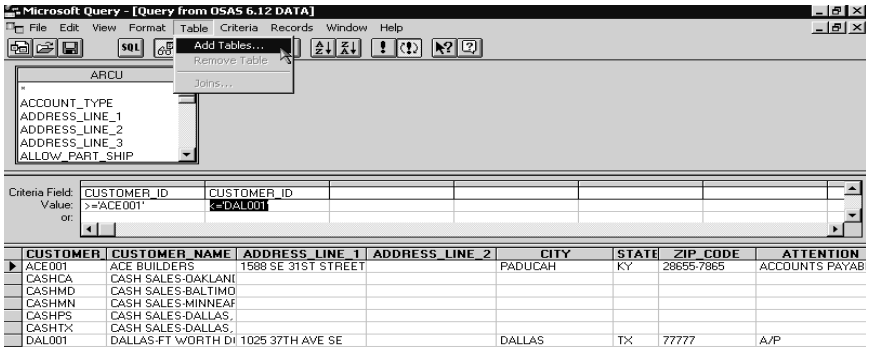


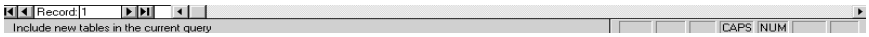
The table is removed, along with any field and criteria from the table.

Adding Tables - No Automatic Join

Sometimes when you add a table the join is not created automatically because Microsoft Query does not find the same field name in both of the tables. In those cases you will have to manually create the link between the tables.

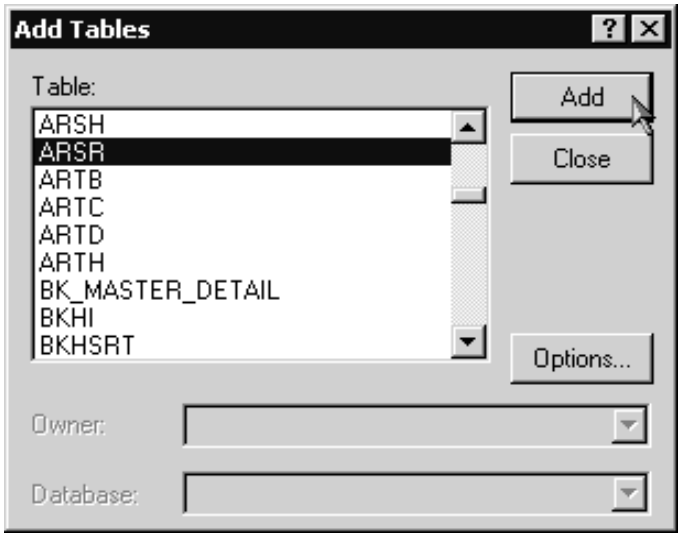
Query 1 - Add Table





To add a table to the query select Add Table from the Table menu.

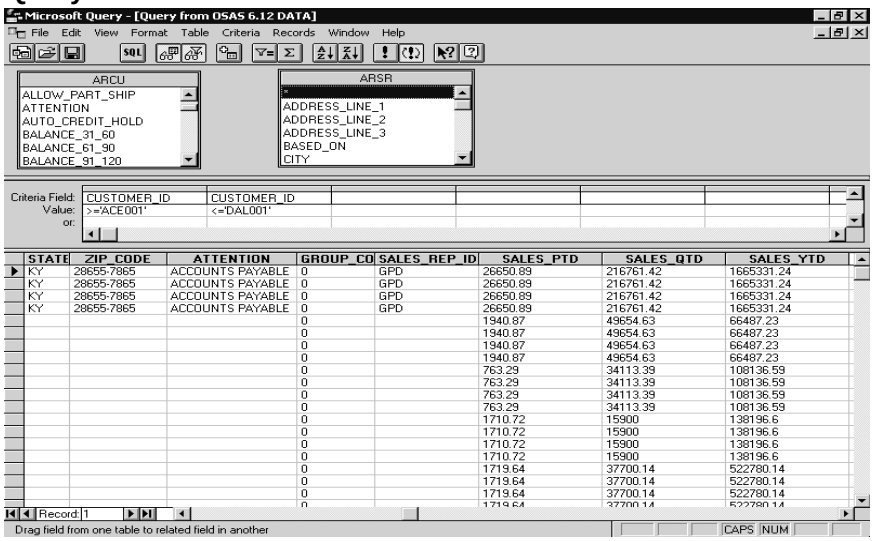
Add Tables



The Add Tables box is displayed. Select the table you want to add to the query and click the Add button. After adding the table(s) click the Close button.

Select the ARSR table and click the Add button.

Query 1 - ARSR Table Added

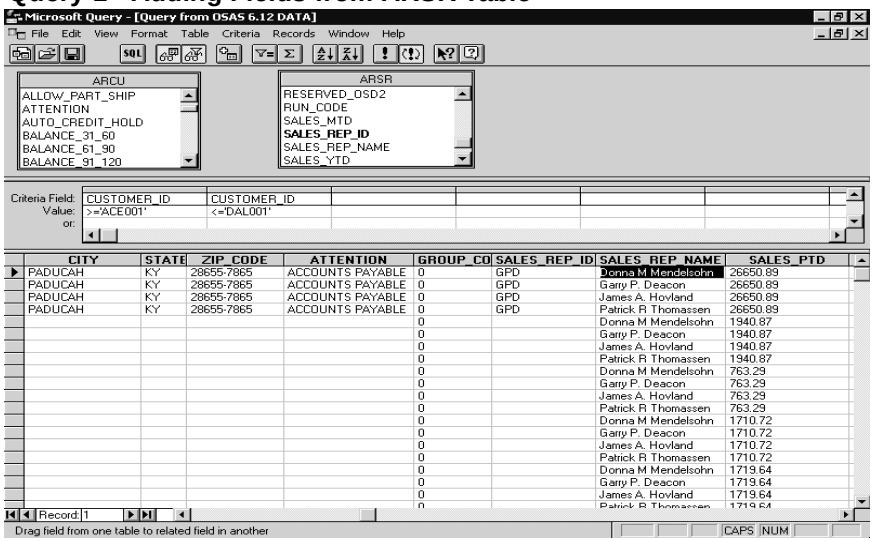


The table is added to the query, but since the two tables do not have a field name in common, the join is not created automatically.

The query creates a row for every record in the second table, per record in the first table.

In this example there is a row for every record in the ARSR file per customer from the ARCU file, even though the data on the query is only from the ARCU file.

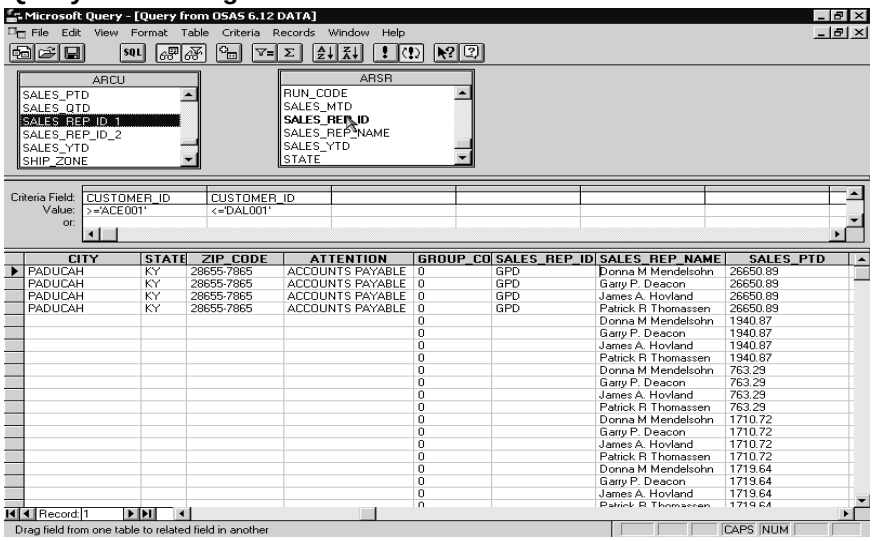
Query 1 - Adding Fields from ARSR Table



Add the SALES_REP_NAME field from the ARSR table. Add it after the SALES_REP_ID_1 field.

Since the query did not create the join automatically the Sales Rep Name does not necessarily correspond to the Sales Rep ID.

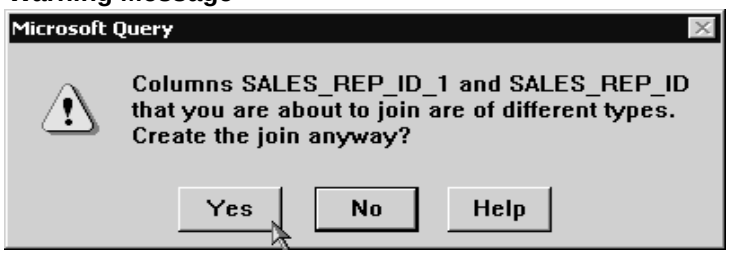
Query 1 - Creating A Join



To create a join, select the field from the first table, drag and drop it on the field in the second table or select Joins from the Table menu to create the link with the Joins box.

For the link between the ARCU and ARSR files, drag the SALES_REP_ID_1[6] field from the ARCU table and drop it on the SALES_REP_ID field in the ARSR table.

Warning Message

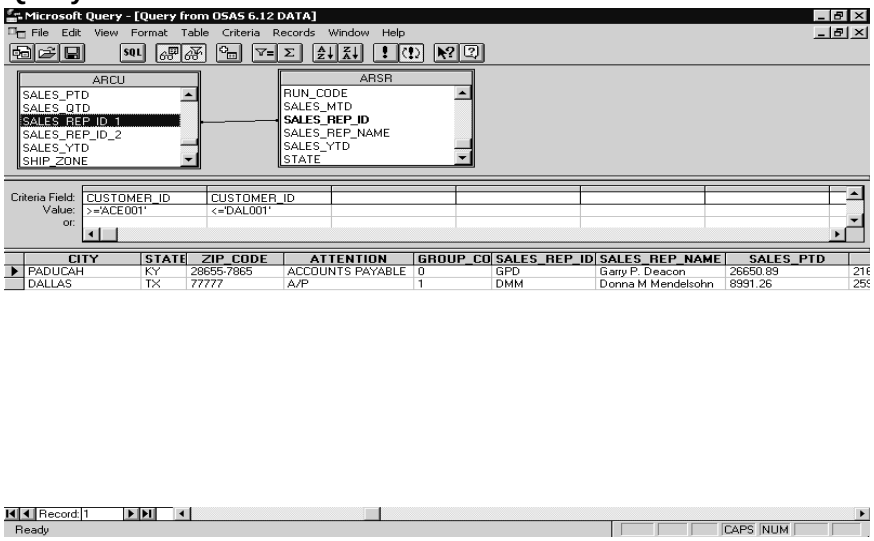


Because the fields have different names, Microsoft Query warns that the fields are different types and ask if you want to create the join anyway.

Select Yes to create the join.

6.in this example you can also select the SALES_REP_ID_2 field from the ARCU file.

Query 1 - Join between ARCU and ARSR



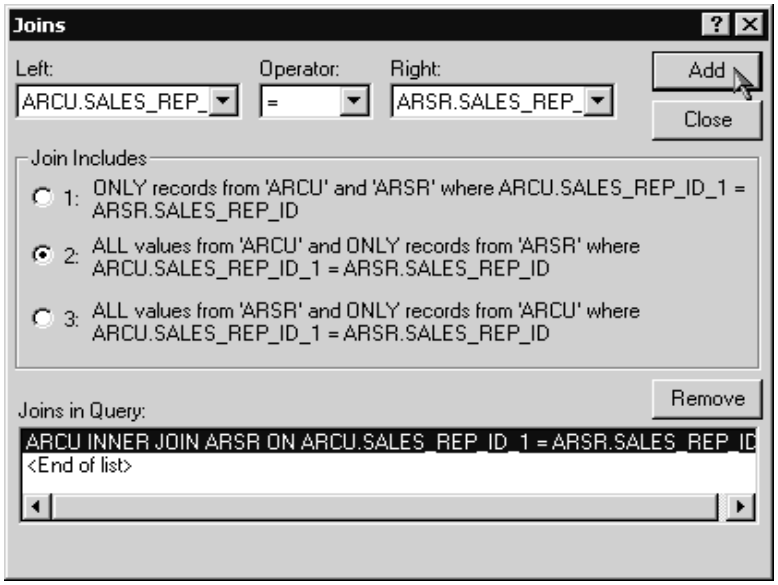
The join is created and the query updated to reflect the changes.

Only records where the ARCU SALES_REP_ID_1 field matches the ARSR SALES_REP_ID field are displayed, which was not the desired result. We were trying to get the join to keep all the records from the ARCU file but display the correct Sales Rep Name from the ARSR file

We need to edit the join to include all records from the ARCU file but only the records that match in the ARSR file.

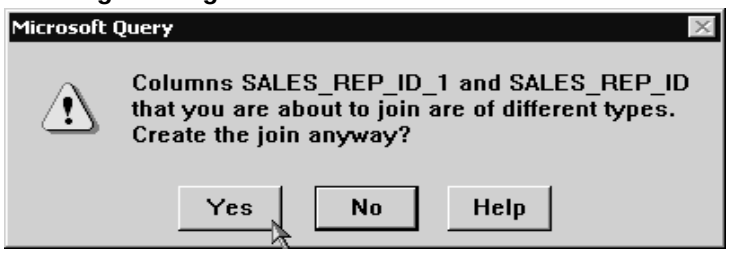
Double click the join or select Joins from the Table menu.

Joins Box



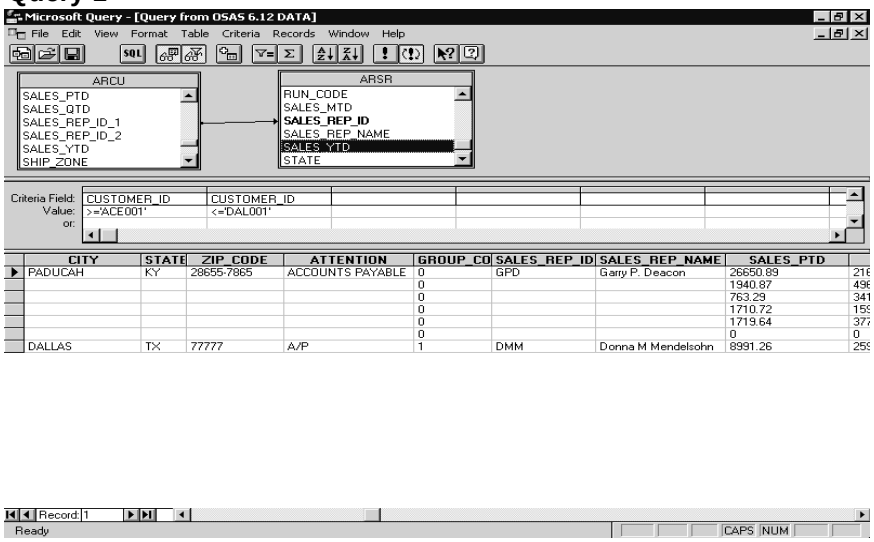
In the Joins Include area, change the join type from 1 to 2 and click the Add button. This changes the join from an inner to and outer join.

Warning Message



The warning message reappears. Click Yes to create the join.

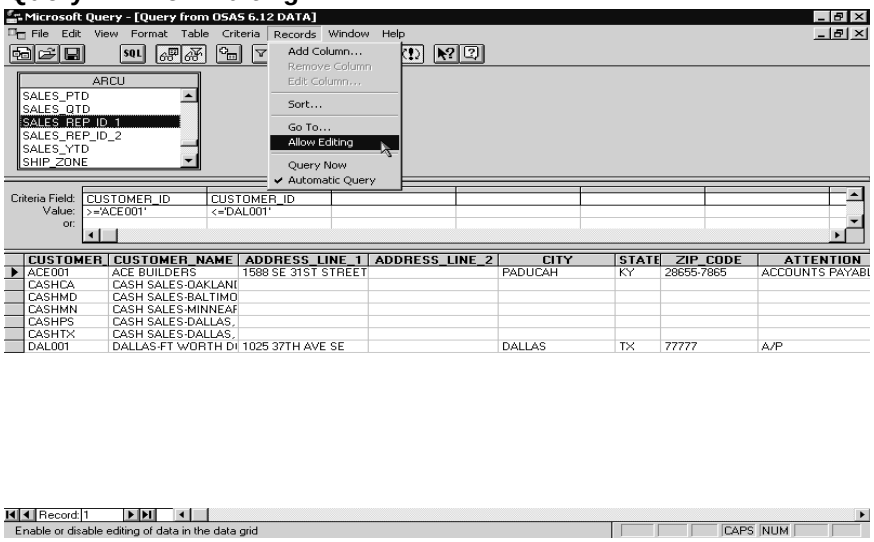
Query 1



The query is now updated to display all the records from the Customer File (ARCU) and the matching records from the Sales Rep File (ARSR).

Read/Write ODBC

Query 1 - Allow Editing



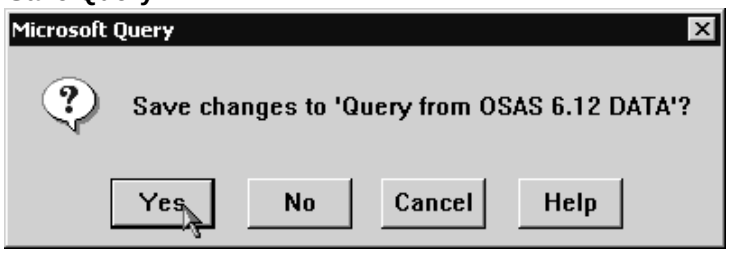
If you have the Read/Write version of the BASIS ODBC Drivers you can change fields or add records in Microsoft Query and automatically change the field in OSAS.

To edit or add fields through Microsoft Query select Allow Editing from the Records menu.

Note

Use this option with extreme caution. Changing a field in Microsoft Query will automatically change the field in OSAS. There are no warning messages or prompts for the change. Once you leave the changed field, the OSAS field is updated.

Save Query



When you Exit query, you are prompted to save the query

Click **Yes** to save the query changes.

Click **No** if you do not want to save the changes.

Click **Cancel** if you do not want to exit the query

Click **Help** to display help about Microsoft Query.

Microsoft Excel

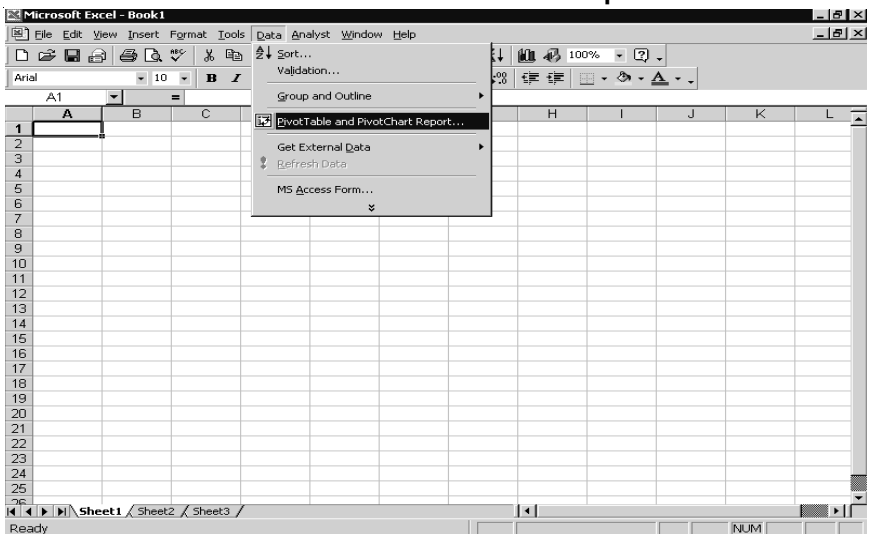
This section walks you through creating PivotTables and Worksheets using the ODBC Kit and Microsoft Excel 2000.

PivotTables

The following example will walk you through all the steps necessary to set up a pivot table using the Accounts Receivable/Sales Order Customer File

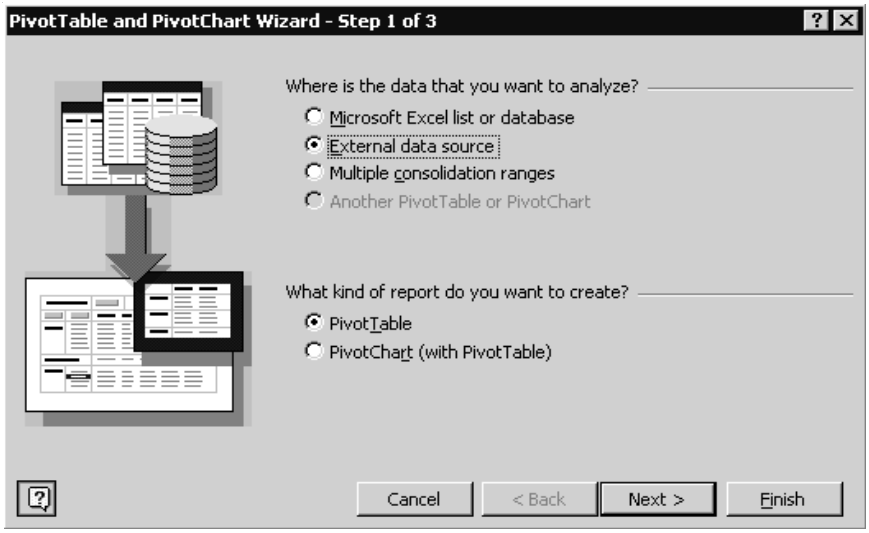
Start Excel with a blank sheet. Select **PivotTable and PivotChart Report** from the Data menu.

Microsoft Excel – PivotTable and PivotChart Report



There are 3 steps in creating a PivotTable Report. The PivotTable and PivotChart Wizard – Step 1 of 3 is displayed[7].

PivotTable and PivotChart Wizard – Step 1 of 3



Step 1 prompts for the location of your data source.

The OSAS data will always be an External Data Source.

Select External Data Source and click Next.

7. In Microsoft Excel 97 there are 4 steps to create a pivot table.

PivotTable and PivotChart Wizard – Step 2 of 3, No data fields selected

Step 2 of 3 is displayed.

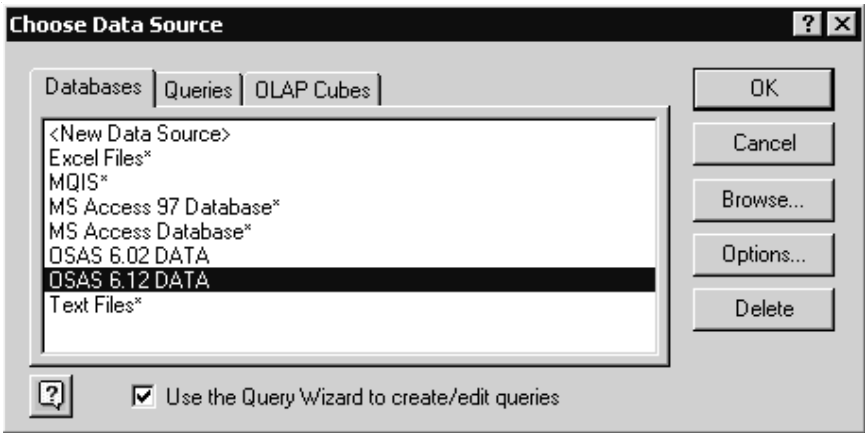
You are prompted for the location of the external data.

No data fields have been retrieved is displayed next to the Get Data button.

The **Next** button is unavailable because data fields have not been selected.

Click the Get Data button to select the files and fields for the pivot table.

Choose Data Source Screen



The **Choose Data Source** screen is displayed. Choose the data source to use for the pivot table.

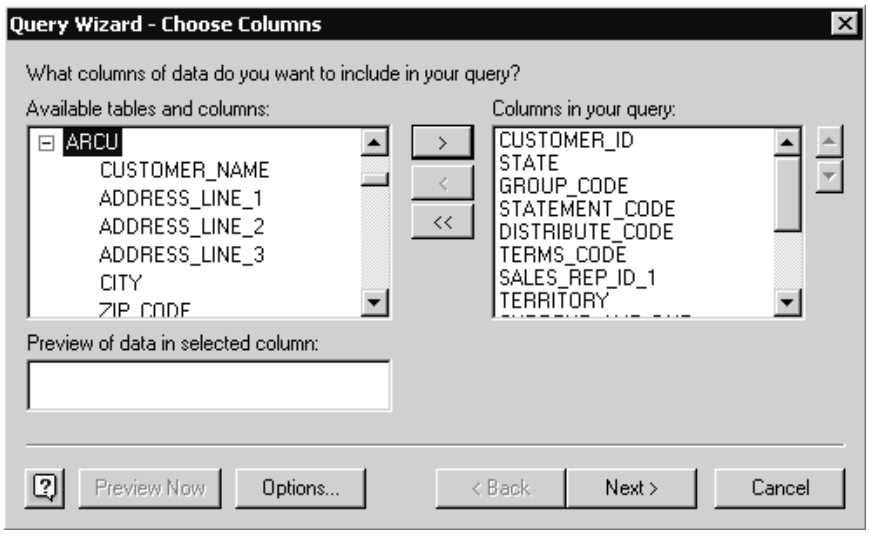
If you have not created a data source select <New Data Source> (**See Appendix E**)

Click OK to proceed.

For this pivot table choose the data source created earlier.

The Query Wizard – Choose Columns screen is displayed.

Query Wizard – Choose Columns



Select the tables and columns (files and fields) you want to access and use with in your query.

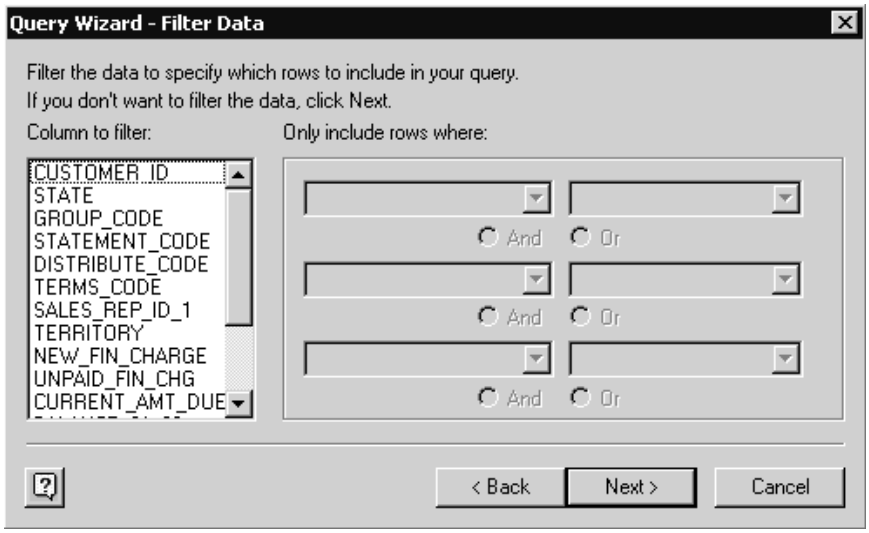
Field	Description
Available tables and columns	Select the files and the fields to include in the query. Click the + next to the file name to expand the file and display all the fields within that file. To add a field to the query, highlight the field name and click >. To add all the fields highlight the file name and click >[1]. **Select the ARCU table. From the ARCU table, select the CUSTOMER_ID, STATE, GROUP_CODE, STATEMENT_CODE, DISTRIBUTE_CODE, TERMS_CODE, SALES_REP_ID_1, TERRITORY, CURRENT_AMT_DUE, BALANCE_31_60, BALANCE_61_90, BALANCE_91_120, BALANCE_OVER_120, UNAPPLIED_CREDIT, NEW_FINANCE_CHARGE,** and **UNPAID_FIN_CHARGE** fields.
Columns in your query	Displays the fields select for this query. To remove a field, highlight the field and click <. To remove all the fields, click <<

1. You can also double click the field names or the file name to add them to your query.

Click the **Next** button.

The Query Wizard – Filter Data screen is displayed.

Query Wizard – Filter



Select the fields you want to impose criteria on.

Field	Description
Column to filter	Select the fields in your query to setup criteria for.
Only include rows where – box 1	Select the operator for the criteria. Use the combo button to select from a list of available operators.
Only include rows where – box 2	Enter the expression to compare the field to. You can use the combo button to select from the data stored in the OSAS files.

You can create filters for any of the selected fields in your query.

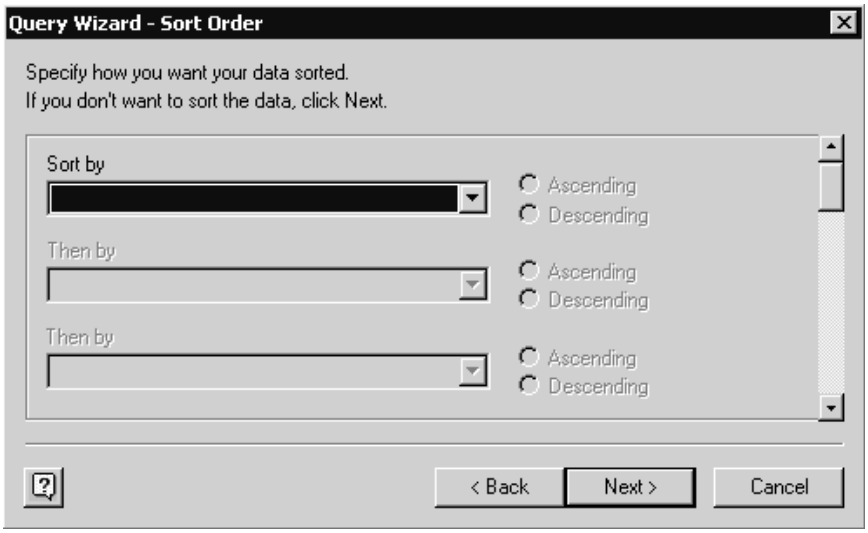
Filter data is an optional function.

Leave blank for this PivotTable

Click the **Next** button.

The Query Wizard – Sort Order screen is displayed.

Query Wizard – Sort Order



Select the fields by which you want to sort the query with and the sort order

Field	Description
Sort by	Select the first field to sort the query with. Sorts are optional.
Then by	Select additional fields to sort the query with. This will create sorts within sorts on your query.
Ascending Descending	If a sort is selected, select the sort order. Ascending order is A to Z, lowest to highest. Descending order is Z to A, highest to lowest.

You can sort by any of the selected fields for your query.

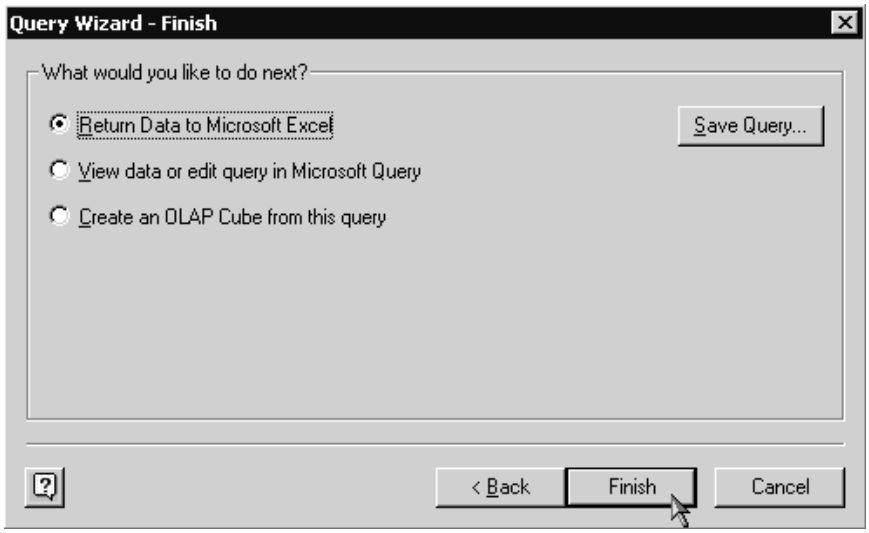
Sort Order is an optional function.

Leave blank for this PivotTable

Click the **Next** button.

The Finish screen is displayed

Query Wizard – Finish



Select where you would like to display the data.

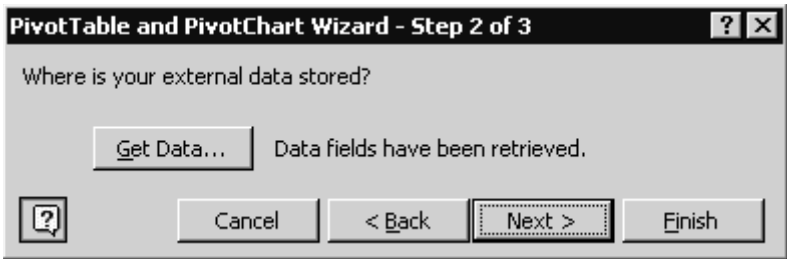
Field	Description
Return Data To Microsoft Excel	Select to view the data on an Excel spreadsheet or PivotTable Report
View data or edit query in Microsoft Query	Select to start Microsoft Query to view or edit the data
Create an OLAP Cube from this query.	Select to create an OLAP data cube for this query.
Save Query	Click to save the query for future use.

Select Return data to Microsoft Excel

Click the **Finish** button.

The PivotTable and PivotChart Wizard – Step 2 of 3 screen is re-displayed.

PivotTable and PivotChart Wizard – Step 2 of 3, fields selected



Data fields have been selected now.

Click on the **Next** button.

The PivotTable and PivotChart Wizard – Step 3 of 3 screen is displayed.[8]

PivotTable and PivotChart Wizard – Step 3 of 3

In Microsoft Excel 2000 and 2002 Step 3 asks where you want the pivot table.

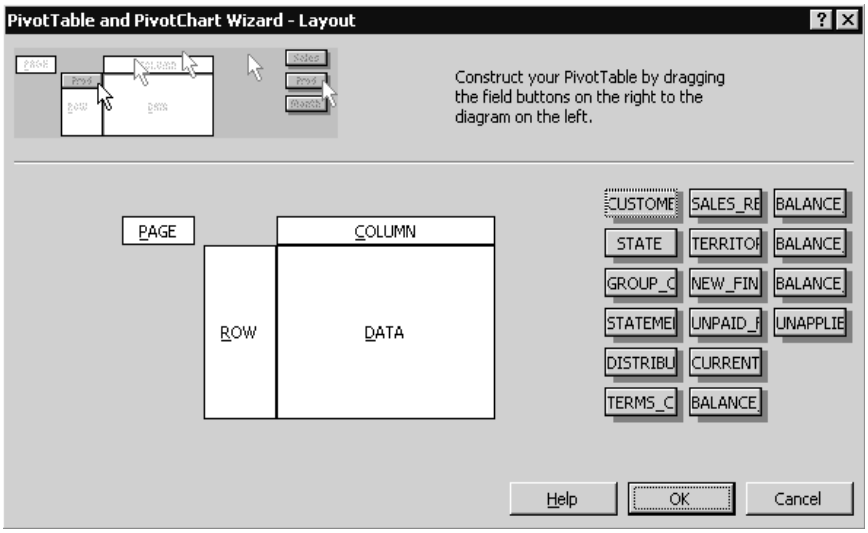
Before selecting where to place the PivotTable, choose where to place the fields.

Click the Layout button to choose where you want the fields on the pivot table.

8.If you are using Microsoft Excel 97 this is Step 4 of 4 of the PivotTable Wizard.

The PivotTable and Pivot Chart Wizard Layout screen is displayed.[9]

PivotTable and PivotChart Wizard – Layout Screen



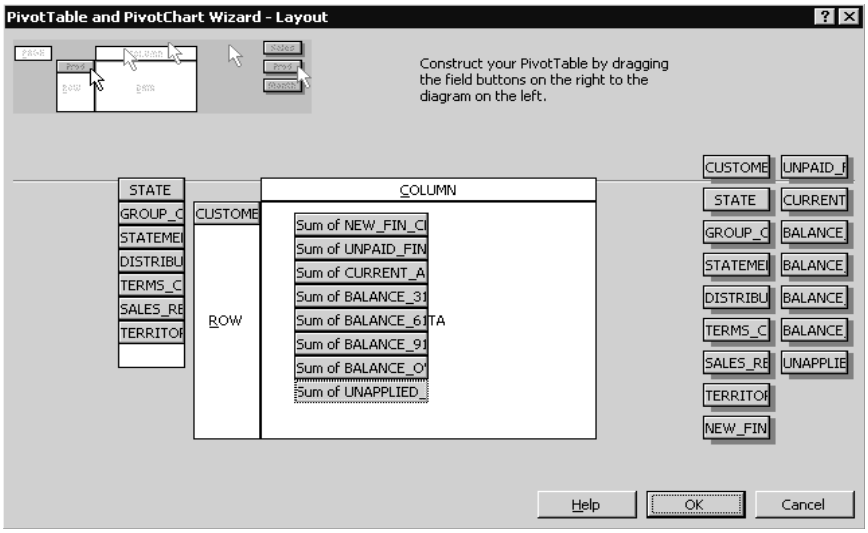
Choose where you want your data to display within the pivot table.

There are four different areas of a pivot table.

Area	Description
Page	The fields listed here control the data for the entire pivot table
Row	Displays data fields in rows going down
Column	Displays data fields in columns going across
Data	Displays the value for the fields selected in the Row and Column area

9. If you are using Microsoft Excel 97, this is Step 3 of 4.

PivotTable and PivotChart Wizard – Layout Screen

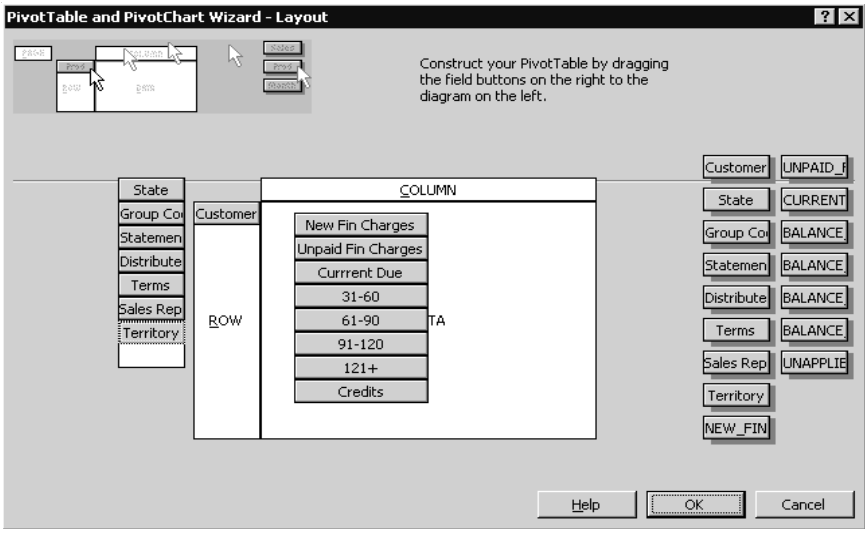


For this pivot table place the CUSTOMER_ID field in the ROW Area

Place the STATE, GROUP_CODE, STATEMENT_CODE, DISTRIBUTE_CODE, TERMS_CODE, SALES_REP_1 *and* ***TERRITORY fields in the PAGE Area***

Place the NEW_FIN_CHARGES, UNPAID_FIN_CHARGES,CURRENT_AMT_DUE, BALANCE_31_60, BALANCE_61_90, BALANCE_91_120, BALANCE_OVER_120 *and* ***UNAPPLIED_CREDIT in the Data Area***

PivotTable and PivotChart Wizard – Layout Screen



You can change the name of the fields by double clicking on the field and typing in a different name. The name you enter will display on the pivot table, but the Query will use the original field names.

You cannot change the field names to a name that is already in the Query or on the pivot table.

Once the fields have been placed on the pivot table, click OK.[10]

10. If you are using Microsoft Excel 97, click the Next button.

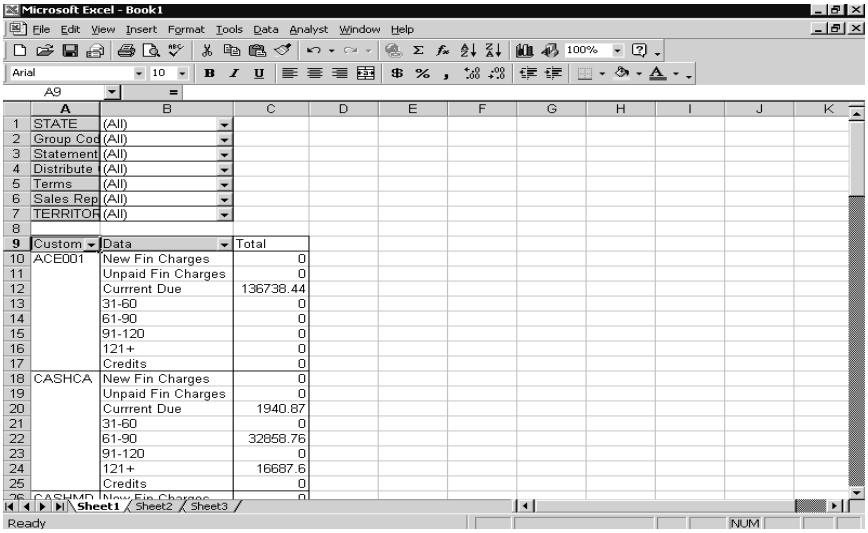
The PivotTable and PivotChart Wizard – Step 3 of 3 screen is re-displayed.[11]

PivotTable and PivotChart Wizard – Step 3 of 3

Select where you would like to put the PivotTable.

Click the Finish button.

Customer Balance PivotTable



The pivot table is displayed.

The fields added to the Page area are displayed in Column A with a dropdown box for each in Column B.

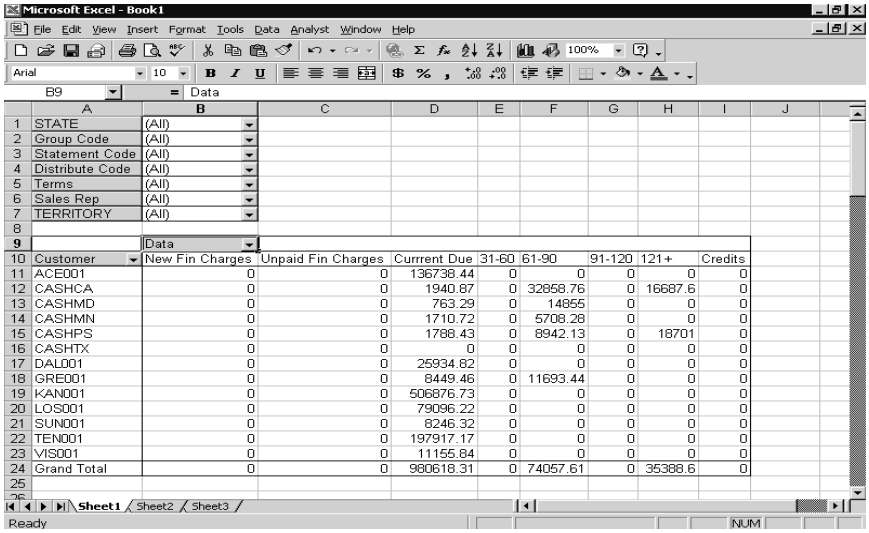
The Customers are displayed in the Row area with balances for each in the Data area.

The Customer Balances are shown in rows for each customer, in the data section.

Click the DATA heading and drag and drop it on the Total column.

11. If you are using Microsoft Excel 97 this is Step 4 of 4 of the pivot table Wizard.

Customer Balance PivotTable

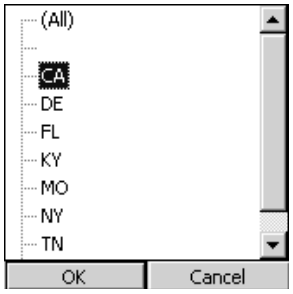


	A	B	C	D	E	F	G	H	I	J
1	STATE	(All)								
2	Group Code	(All)								
3	Statement Code	(All)								
4	Distribute Code	(All)								
5	Terms	(All)								
6	Sales Rep	(All)								
7	TERRITORY	(All)								
8										
9		Data								
10	Customer	New Fin Charges	Unpaid Fin Charges	Currrent Due	31-60	61-90	91-120	121+	Credits	
11	ACE001	0	0	136738.44	0	0	0	0	0	
12	CASHCA	0	0	1940.87	0	32858.76	0	16687.6	0	
13	CASHMD	0	0	763.29	0	14855	0	0	0	
14	CASHMN	0	0	1710.72	0	5708.28	0	0	0	
15	CASHPS	0	0	1788.43	0	8942.13	0	18701	0	
16	CASHTX	0	0	0	0	0	0	0	0	
17	DAL001	0	0	25934.82	0	0	0	0	0	
18	GRE001	0	0	8449.46	0	11693.44	0	0	0	
19	KAN001	0	0	506876.73	0	0	0	0	0	
20	LOS001	0	0	79096.22	0	0	0	0	0	
21	SUN001	0	0	8246.32	0	0	0	0	0	
22	TEN001	0	0	197917.17	0	0	0	0	0	
23	VIS001	0	0	11155.84	0	0	0	0	0	
24	Grand Total	0	0	980618.31	0	74057.61	0	35388.6	0	

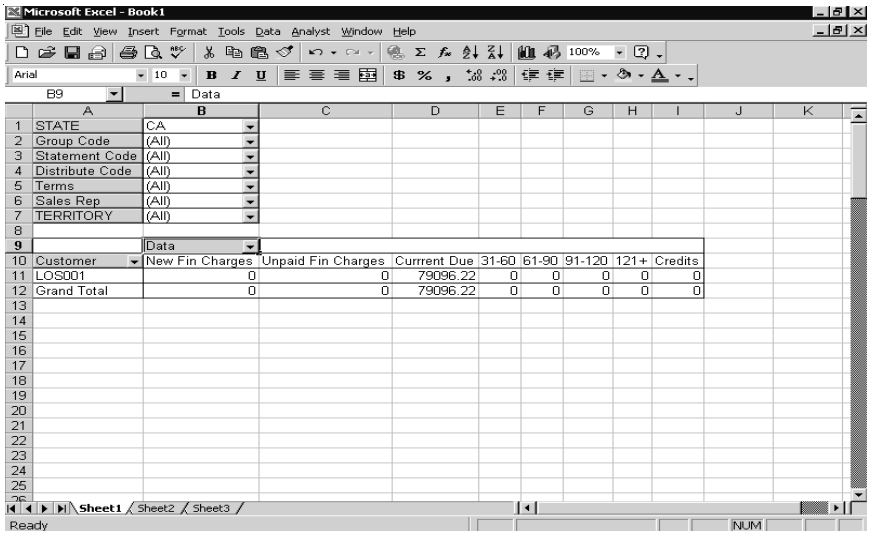
Select different drop down boxes in the Page area to display specific data.

Example: Select CA in the State dropdown box and Click OK.

STATE Dropdown Box



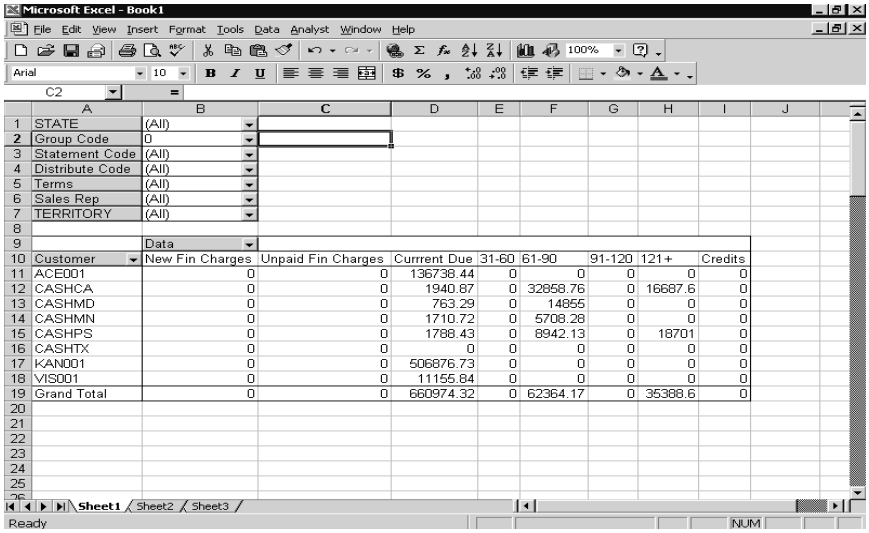
Customer Balance PivotTable



	A	B	C	D	E	F	G	H	I	J	K
1	STATE	CA									
2	Group Code	(All)									
3	Statement Code	(All)									
4	Distribute Code	(All)									
5	Terms	(All)									
6	Sales Rep	(All)									
7	TERRITORY	(All)									
8											
9		Data									
10	Customer	New Fin Charges	Unpaid Fin Charges	Currrent Due	31-60	61-90	91-120	121+	Credits		
11	LOS001	0	0	79096.22	0	0	0	0	0		
12	Grand Total	0	0	79096.22	0	0	0	0	0		

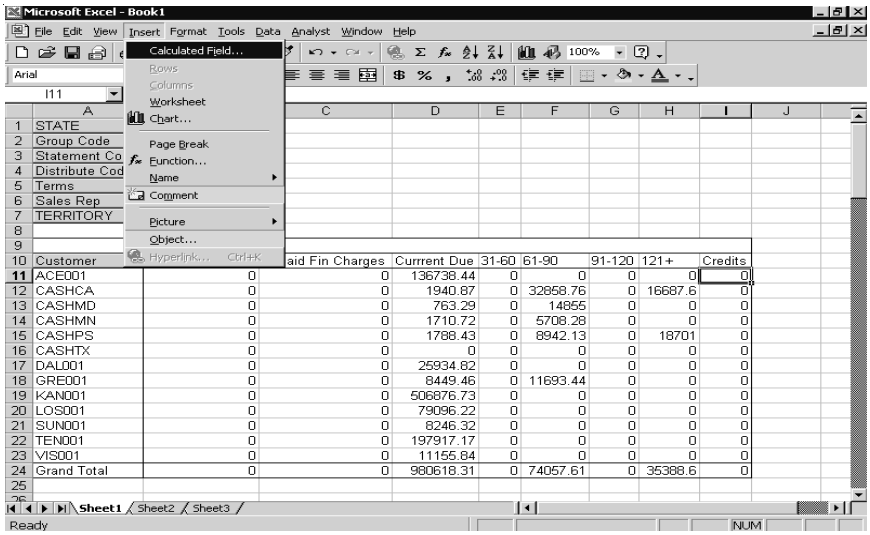
Only Customers and data for California are displayed.

Customer Balance PivotTable



Select All in the State drop down box and select 0 for the Group Code Drop down box.

Customer Balance PivotTable



The next step is to add a column that calculates the total due amount for each customer.

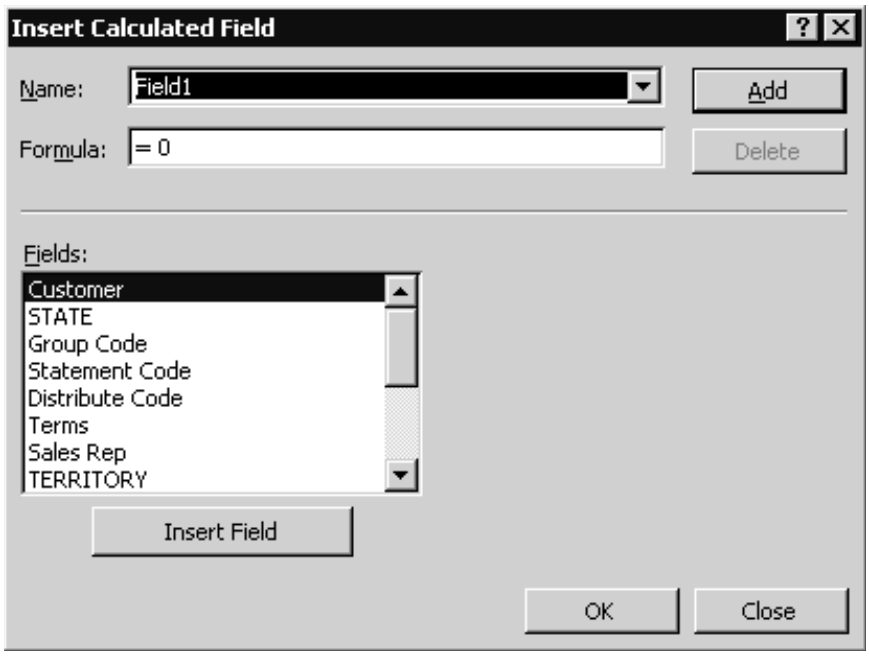
Place the cursor on any field in the pivot table. Select Calculated Field from the Insert menu or right click and select Formula followed by Calculated Field.

Note

The Cursor must be in a a field in the Data section to insert the calculated field.

The Insert Calculated Field box is displayed.

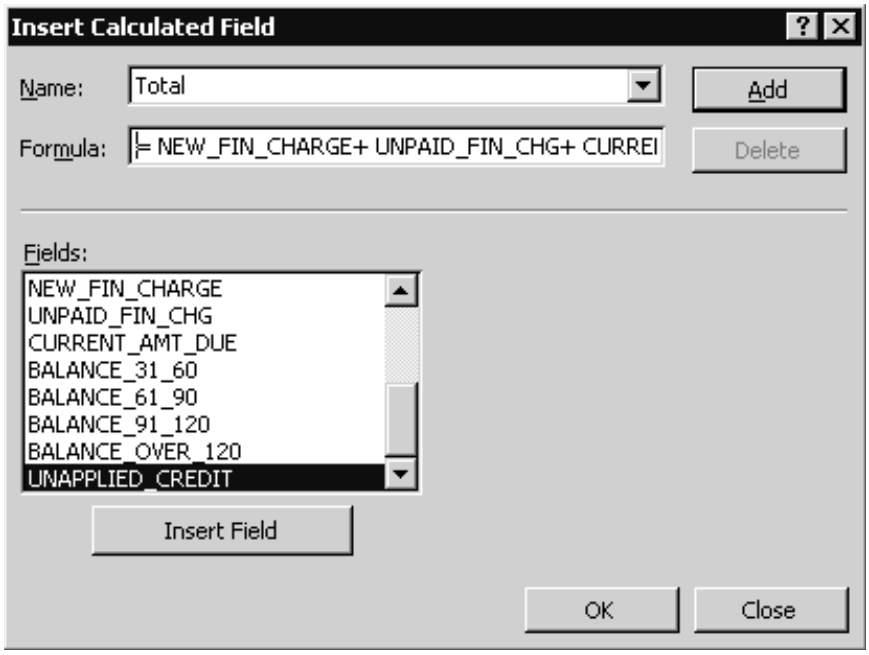
Insert Calculated Field



Select the Field name, Formula and Fields to use for the calculated field.

Field	Description
Name	Enter the name of the field you are creating or accept the default name. If you want to edit or modify an existing field, use the drop down box to select the field name.
Formula	Enter or edit the formula for the field.
Fields	Displays the fields available to use in the calculated field
Insert Field	Click to add the selected field to the formula
Add/Modify	Click to add a new calculated field to the pivot table or update an existing calculated field.
Delete	Click to remove a calculated field from the pivot table
OK	Click to exit Insert Calculated field and save the changes entered.
Close	Click to exit Insert Calculated field.

Insert Calculated Field

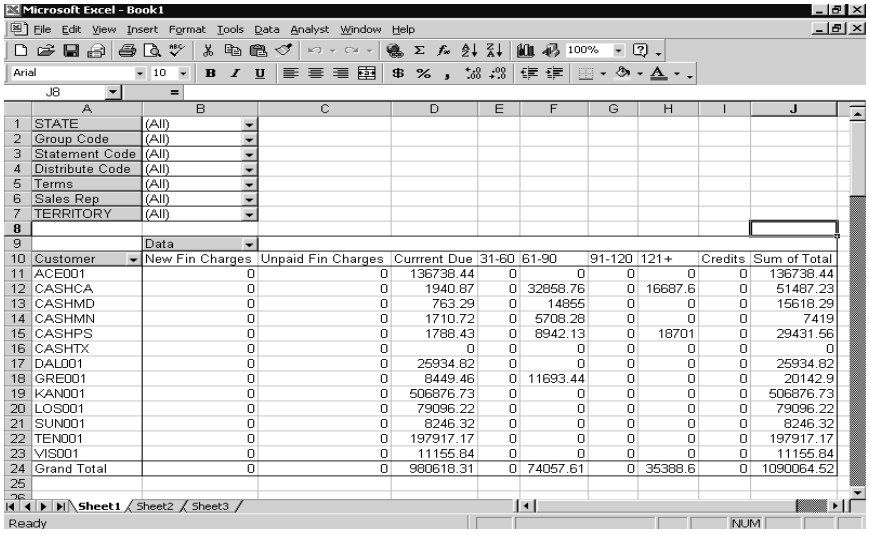


*For this calculation enter **Total** for the Name.*

In the Formula field enter
=NEW_FIN_CHARGES+UNPAID_FIN_CHARGES+CURRENT_AMT_DUE+BALANCE_31_60+BALANCE_61_90+BALANCE_91_120+BALANCE_OVER_120+UNAPPLIED_CREDITS

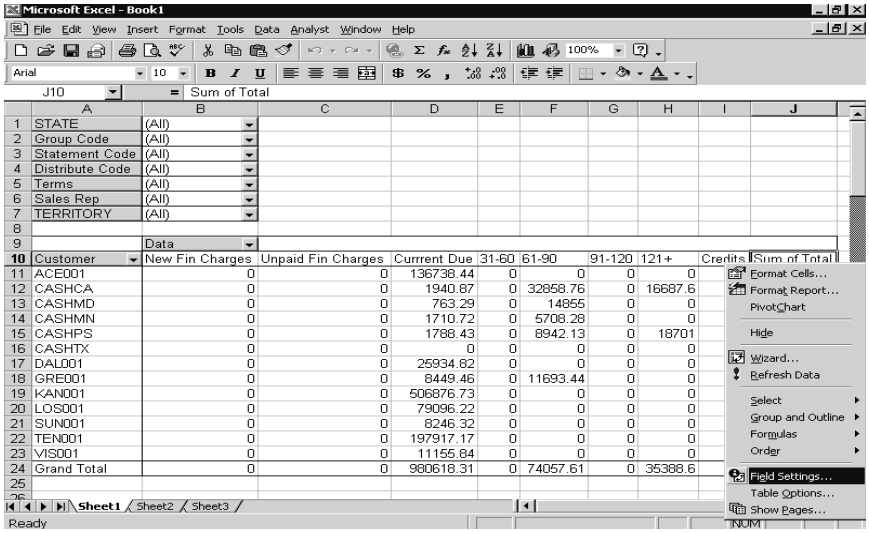
Click Add and OK.

Customer Balance PivotTable



The Total column is added to the PivotTable. The field label displays Sum of Total.

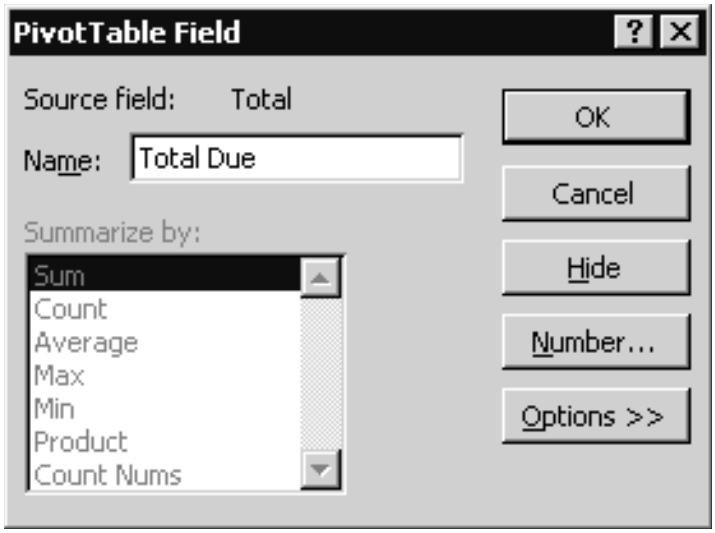
Customer Balance PivotTable



Change the Total field label.

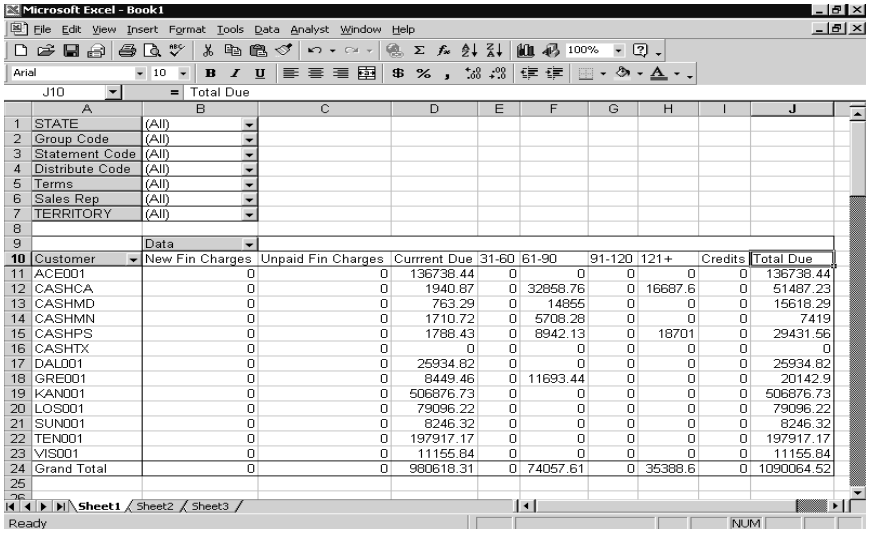
Right click on the Sum of Total field and select Field Properties

PivotTable Field



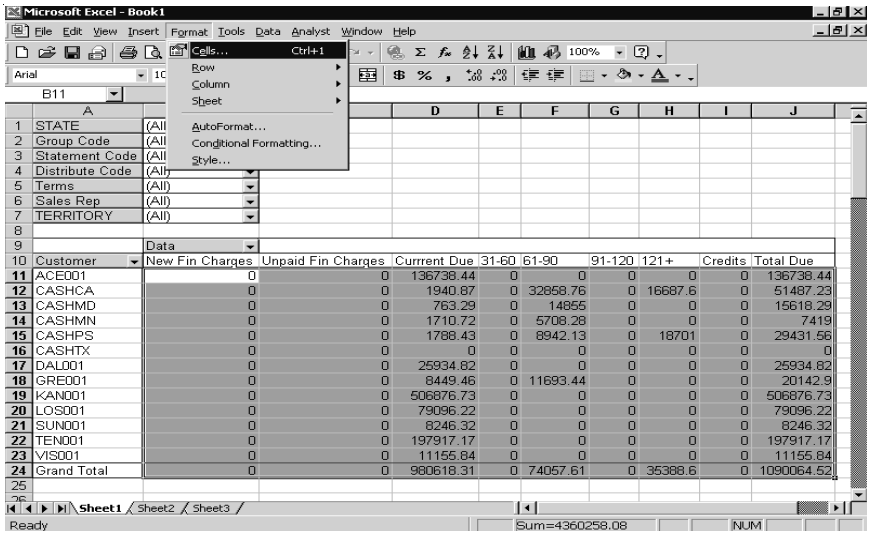
Change the Name to Total Due and click OK.

Customer Balance PivotTable



The new label is displayed.

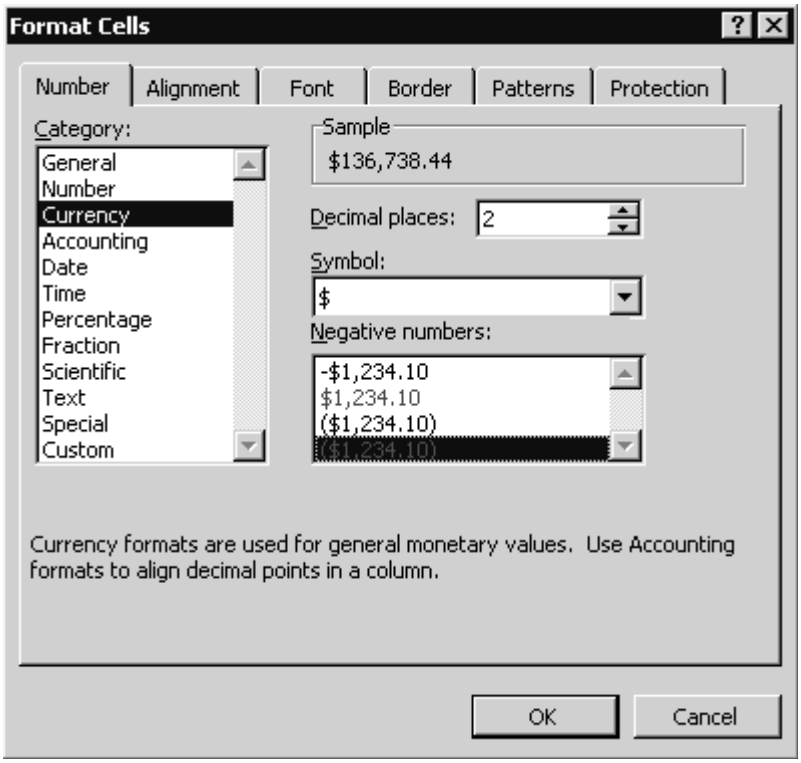
Customer Balance PivotTable



Highlight and select all the amounts in the data section.

Select Cells from the Format menu or right click and select Format followed by Cells.

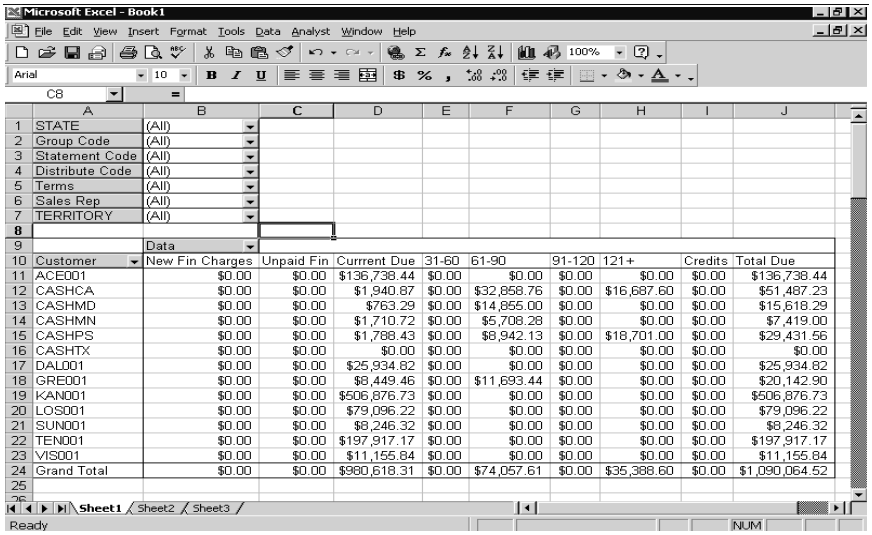
Format Cells



Select the Number tab.

Select Currency; accept the default Decimal places and Symbol. Choose how you want negative number to display and click OK.

Customer Balance PivotTable



Microsoft Excel - Book1

File Edit View Insert Format Tools Data Analyst Window Help

C8

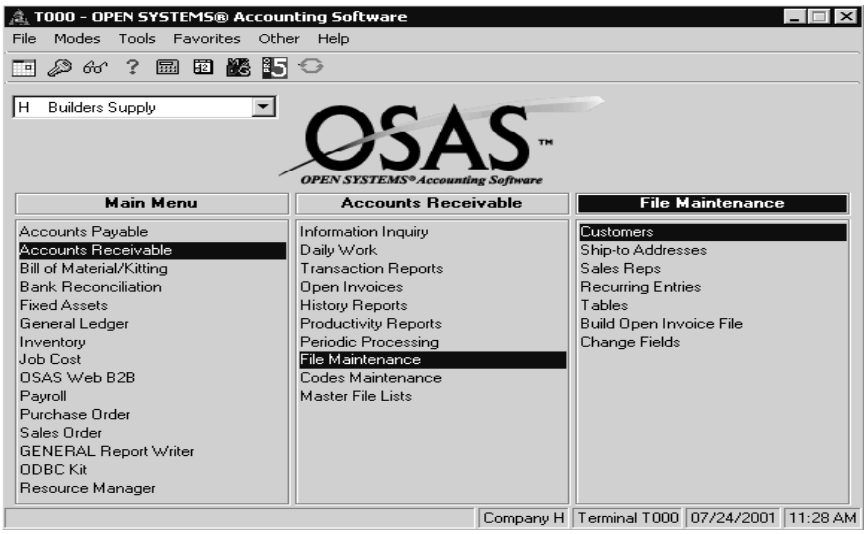
	A	B	C	D	E	F	G	H	I	J
1	STATE	(All)								
2	Group Code	(All)								
3	Statement Code	(All)								
4	Distribute Code	(All)								
5	Terms	(All)								
6	Sales Rep	(All)								
7	TERRITORY	(All)								
8										
9		Data								
10	Customer	New Fin Charges	Unpaid Fin	Currrent Due	31-60	61-90	91-120	121+	Credits	Total Due
11	ACE001	$0.00	$0.00	$136,738.44	$0.00	$0.00	$0.00	$0.00	$0.00	$136,738.44
12	CASHCA	$0.00	$0.00	$1,940.87	$0.00	$32,858.76	$0.00	$16,687.60	$0.00	$51,487.23
13	CASHMD	$0.00	$0.00	$763.29	$0.00	$14,855.00	$0.00	$0.00	$0.00	$15,618.29
14	CASHMN	$0.00	$0.00	$1,710.72	$0.00	$5,708.28	$0.00	$0.00	$0.00	$7,419.00
15	CASHPS	$0.00	$0.00	$1,788.43	$0.00	$8,942.13	$0.00	$18,701.00	$0.00	$29,431.56
16	CASHTX	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00
17	DAL001	$0.00	$0.00	$25,934.82	$0.00	$0.00	$0.00	$0.00	$0.00	$25,934.82
18	GRE001	$0.00	$0.00	$8,449.46	$0.00	$11,693.44	$0.00	$0.00	$0.00	$20,142.90
19	KAN001	$0.00	$0.00	$506,876.73	$0.00	$0.00	$0.00	$0.00	$0.00	$506,876.73
20	LOS001	$0.00	$0.00	$79,096.22	$0.00	$0.00	$0.00	$0.00	$0.00	$79,096.22
21	SUN001	$0.00	$0.00	$8,246.32	$0.00	$0.00	$0.00	$0.00	$0.00	$8,246.32
22	TEN001	$0.00	$0.00	$197,917.17	$0.00	$0.00	$0.00	$0.00	$0.00	$197,917.17
23	VIS001	$0.00	$0.00	$11,155.84	$0.00	$0.00	$0.00	$0.00	$0.00	$11,155.84
24	Grand Total	$0.00	$0.00	$980,618.31	$0.00	$74,057.61	$0.00	$35,388.60	$0.00	$1,090,064.52
25										

Sheet1 Sheet2 Sheet3

Ready NUM

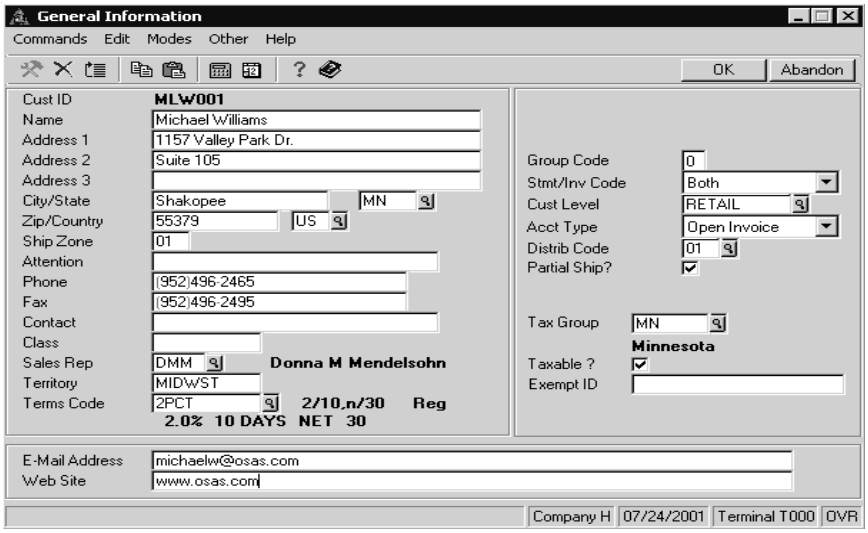
Next, add a new customer in OSAS

Accounts Receivable – File Maintenance



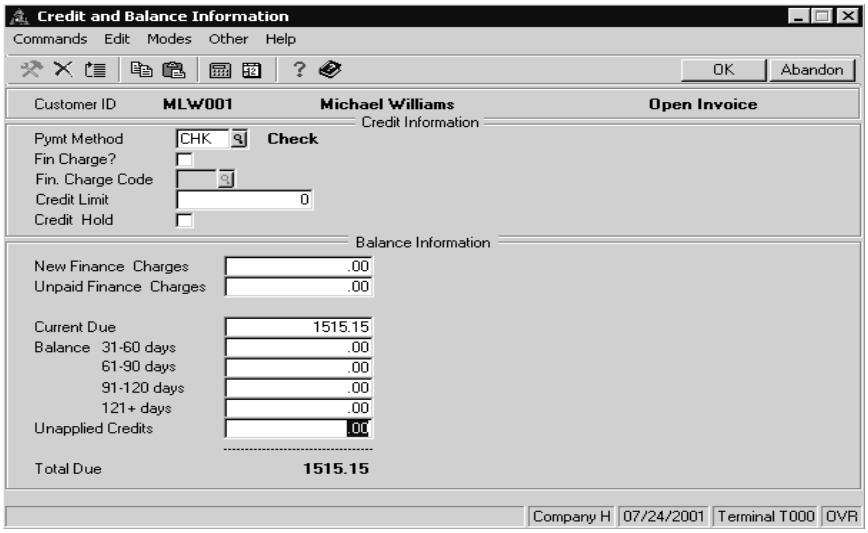
In the Sample Company select Accounts Receivable or Sales Order from the OSAS Main menu. Choose File Maintenance followed by Customers.

Accounts Receivable – Customers



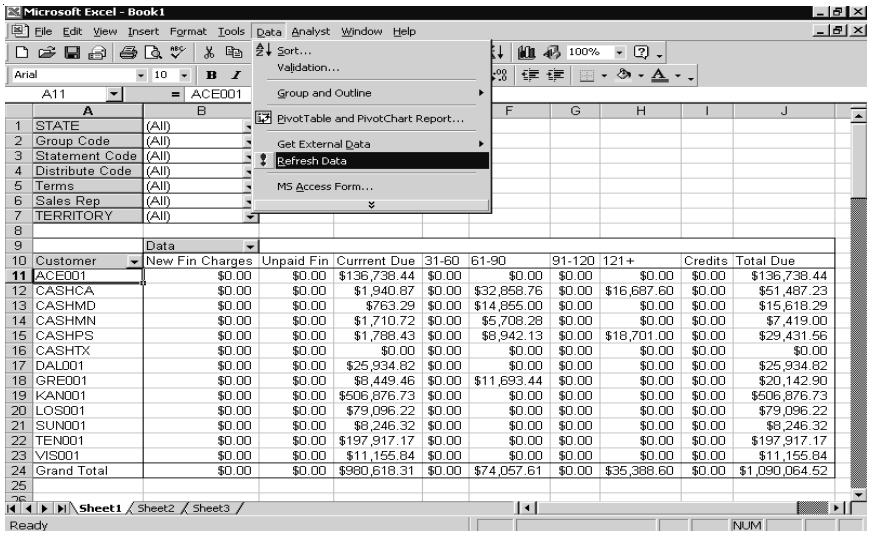
Enter the new customer's information

Accounts Receivable – Customers



Enter balances for the customer.

Customer Balance PivotTable



From the Data menu in Excel, select Refresh Data.

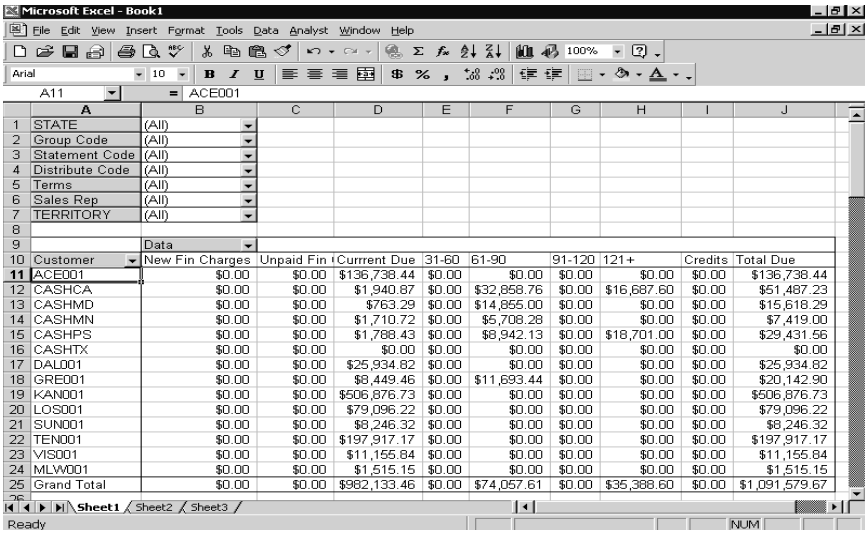
The cursor must be in an imported field to activate the Refresh Data option.

Refresh Data

When new data is added to the pivot table you are given a prompt telling you the PivotTable has changed.

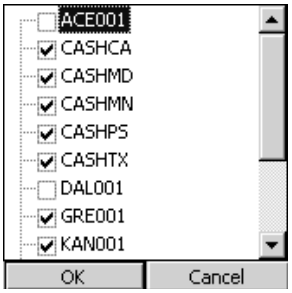
Click OK

Customer Balance PivotTable



The new customer is added to the PivotTable.

Customer Drop Down

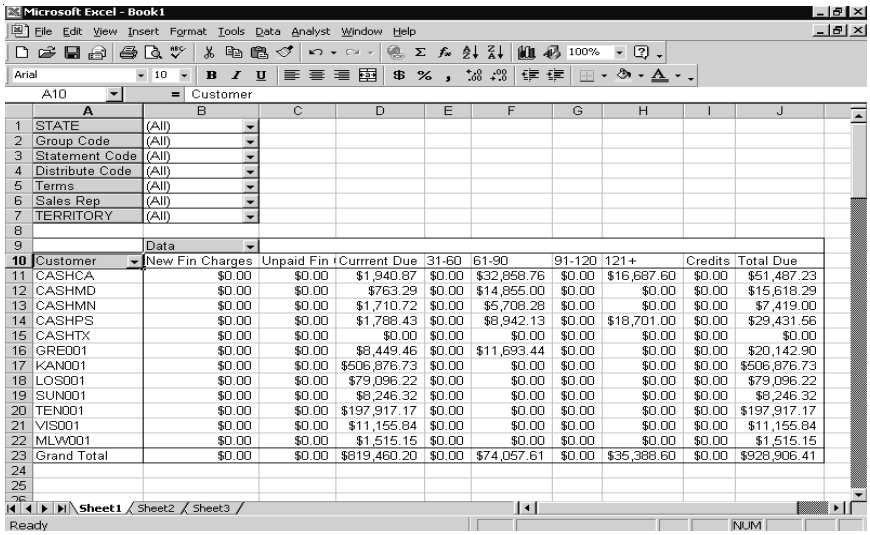


With Excel 2000 and 2002 you get drop down boxes for the fields in the ROW, COLUMN and DATA areas[12].

You can limit the information returned on the PivotTable by selecting and deselecting items in the drop down boxes.

After making your choices click OK

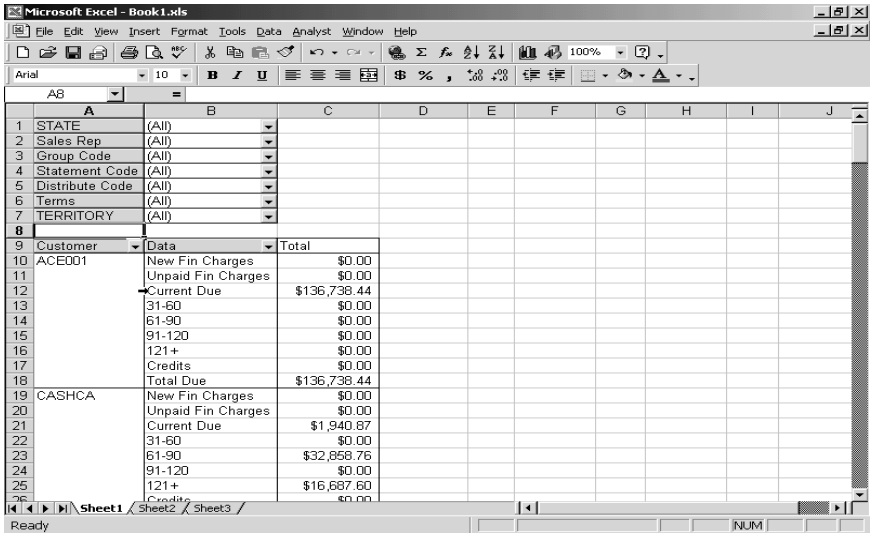
Customer Balance PivotTable



Move the Data column to display the totals for each customer in column B instead of rows. Click the Customer drop down and add all the customers to the pivot table.

12.This option is not available in Excel 97.

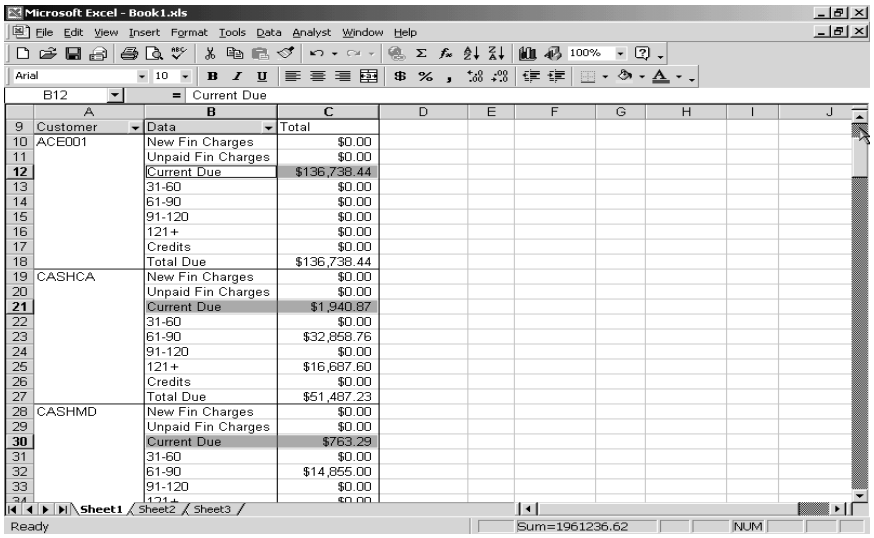
Customer Balance PivotTable



With pivot tables you can highlight one field under Data and automatically highlight all the matching fields.

Place your cursor on a field label until you see a dark arrow[13]. With the arrow displayed, click the field you want to highlight.[14]

Customer Balance PivotTable - Enabled Selection



Click the field and all corresponding matching records are highlighted.

13.If you are using Excel 97 click the field you want.

14.You may have to enable the field. To do this, right click on the field label or Data label. From the pop up menu, choose Select and click the Enable Selection option.

Spreadsheets

Creating spreadsheets in Microsoft Excel using ODBC consist of 3 parts.

1. Planning the spreadsheet
2. Linking to the data through ODBC and selecting the columns.
3. Formatting the columns on the spreadsheet.

AR Collections Spreadsheet

Step 1: Planning the Spreadsheet

- First step in planning the spreadsheet is to decide what fields, or columns, you want on the report. After you select the columns for the spreadsheet, decide the order of the columns.
- Decide which columns if any will have criteria, or filtering.
- Decide the sort order for the fields.
- Decide if there will be any added fields not associated with the OSAS data, such as calculated fields.

Determining this information will help in deciding which file(s) to use for the report.

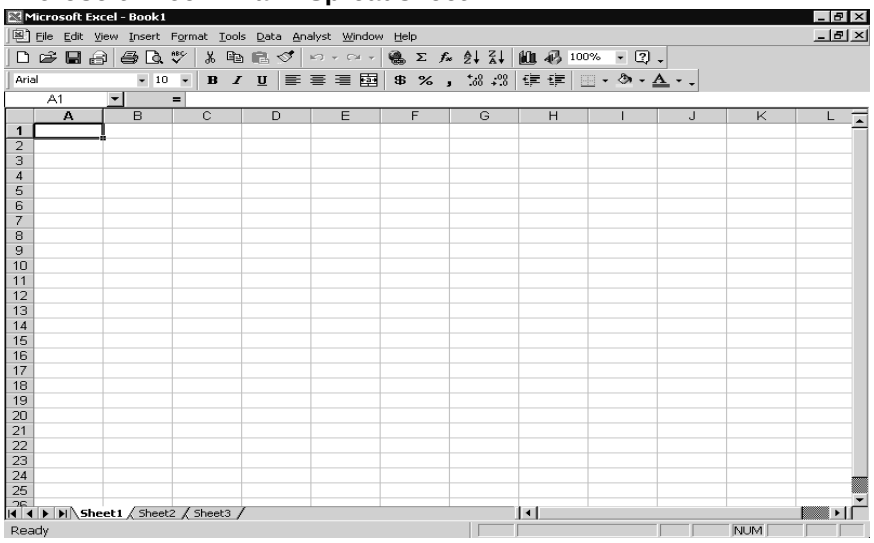
This report will be an AR Collections Report based on the customer file. The report will contain all amounts due for the customer and a column will be calculated for the total amount due. Sorted by Sales Rep.

The fields for this spreadsheet will be Sales Rep ID 1, Customer ID, Customer Name, New Finance Charge, Unpaid Finance Charge, Current Amount Due, Balance 31-60, 61-90, 91-120, over 120 and Unapplied Credits.

Step 2: Linking to the data and selecting the Columns

Start Microsoft Excel with a blank spreadsheet

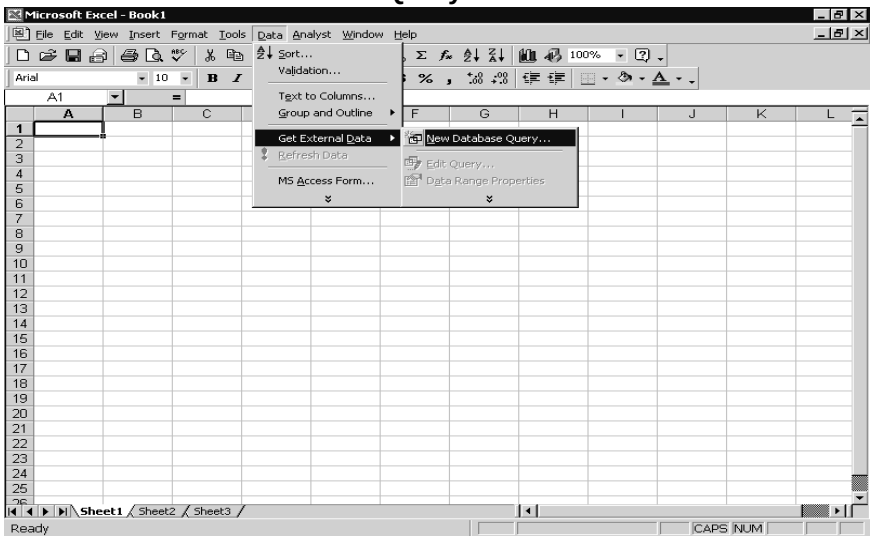
Microsoft Excel - Blank Spreadsheet



Next link to the OSAS data using the ODBC drivers.

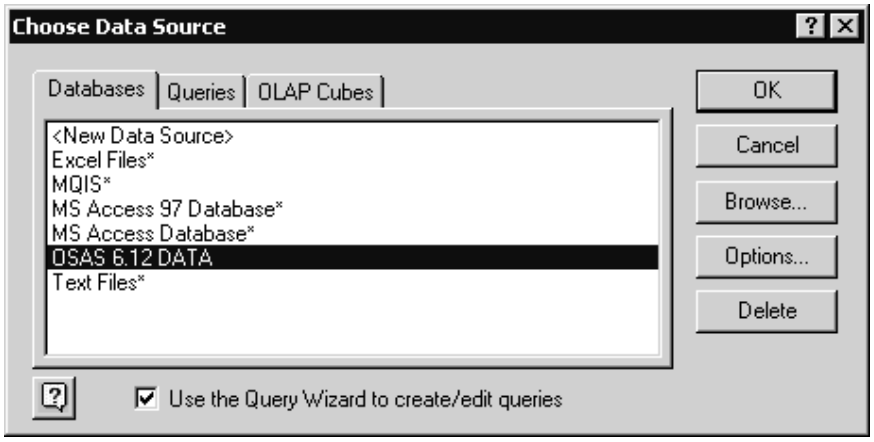
Select Get External Data followed by New Database Query from the Data menu.[15].

Microsoft Excel – Create New Query



15.With Excel 97 select Get External Data followed by Create New query. With Excel 2002 select Import External Data followed by New Database Query.

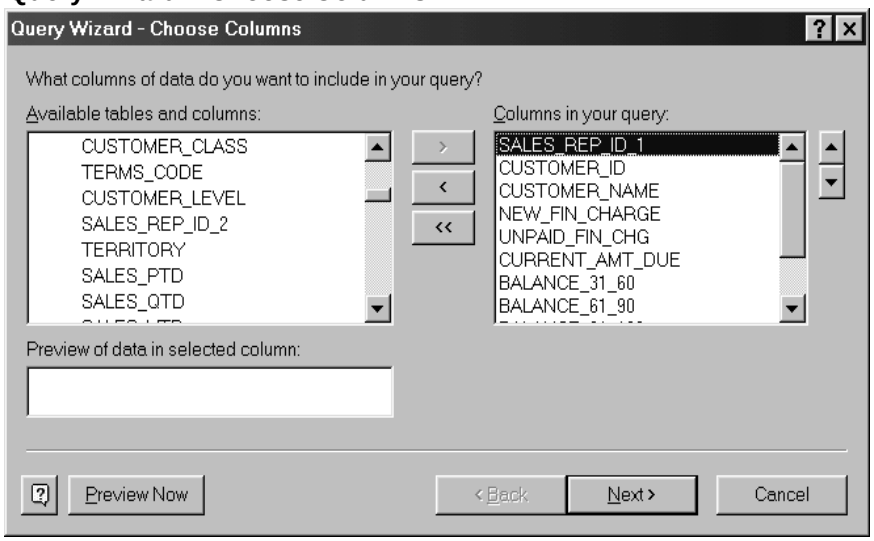
Choose Data Source



The **Choose Data Source** screen is displayed. If you have a data source created, choose it here. If you do not have a data source created select <New Data Source> to create a data source. (**See Appendix E**)

For this spreadsheet select the data source created earlier

Query Wizard – Choose Columns



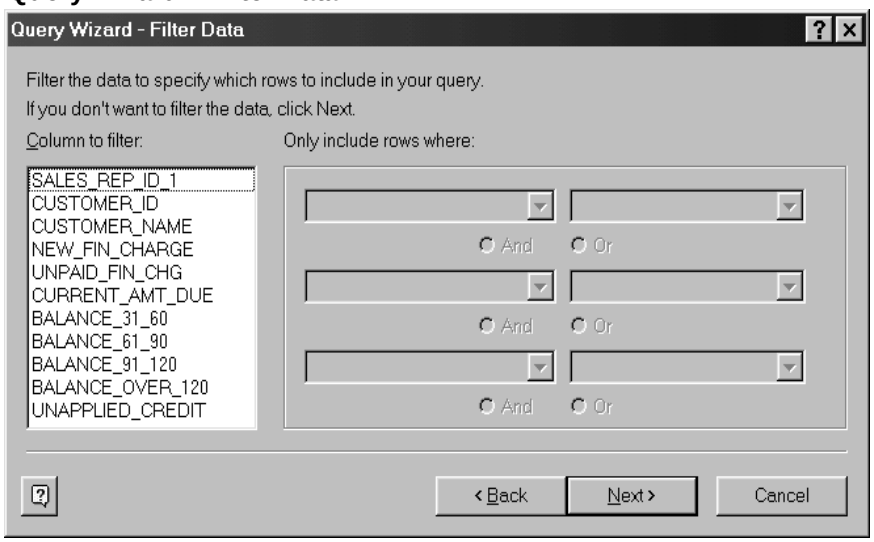
The **Query Wizard – Choose Columns** screen displays. Select the columns, or fields, you want on the spreadsheet.

For this spreadsheet from the ARCU table select ***SALES_REP_ID_1, CUSTOMER__ID, CUSTOMER_NAME, NEW_FIN_CHARGE, UNPAID_FIN_CHARGE, CURRENT_AMT_DUE, BALANCE_31_60, BALANCE_61_90, BALANCE_91_120 BALANCE_OVER_120,*** *and* ***UNAPPLIED_CREDIT****.*

Select the **Next** button.

The **Filter Data** screen displays. Select the fields you want to impose criteria on.

Query Wizard – Filter Data

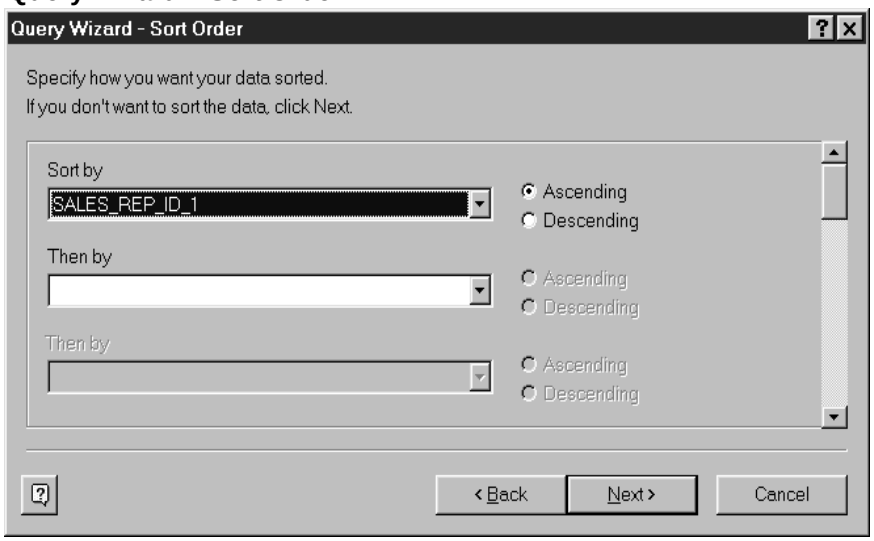


Leave blank for this spreadsheet.

Select the **Next** button.

The **Sort Order** screen displays. You can sort the spreadsheet by any of the fields selected for the spreadsheet

Query Wizard – Sort Order



For this spreadsheet select SALES_REP_ID_1 field and sort in Ascending order.

Select the **Next** button.

The **Finish** screen displays.

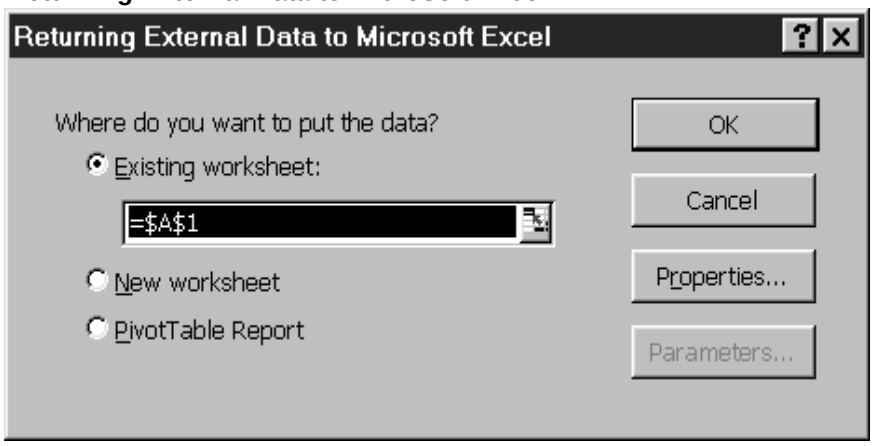
Query Wizard - Finish

Select where you would like to display the data.

Select Return Data to Microsoft Excel and click the Finish button.

The Returning External Data To Microsoft Excel screen displays. Select where you would like to place the data.

Returning External Data to Microsoft Excel

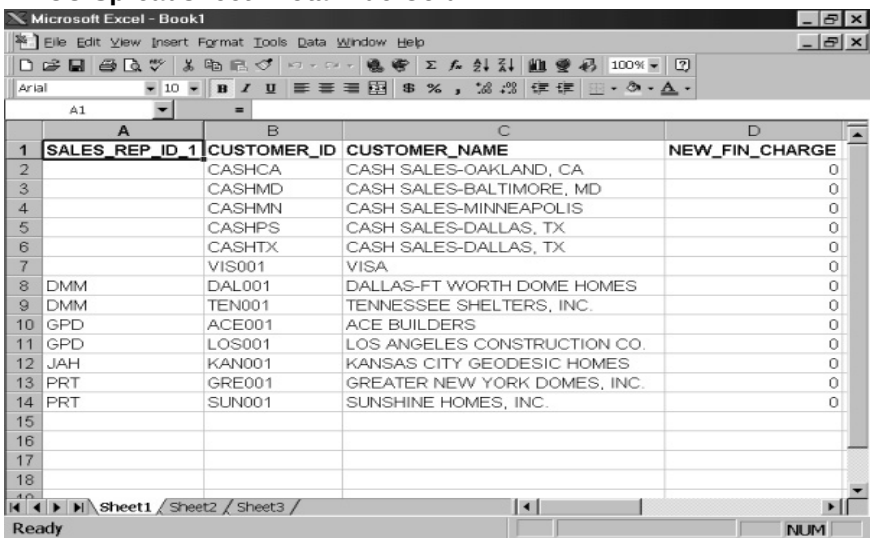


Select Existing Worksheet. Place in cell A1

Click the OK button.

The spreadsheet displays with the selected data.

ARCU Spreadsheet - Total Due Column



	A	B	C	D
1	SALES_REP_ID_1	CUSTOMER_ID	CUSTOMER_NAME	NEW_FIN_CHARGE
2		CASHCA	CASH SALES-OAKLAND, CA	0
3		CASHMD	CASH SALES-BALTIMORE, MD	0
4		CASHMN	CASH SALES-MINNEAPOLIS	0
5		CASHPS	CASH SALES-DALLAS, TX	0
6		CASHTX	CASH SALES-DALLAS, TX	0
7		VIS001	VISA	0
8	DMM	DAL001	DALLAS-FT WORTH DOME HOMES	0
9	DMM	TEN001	TENNESSEE SHELTERS, INC.	0
10	GPD	ACE001	ACE BUILDERS	0
11	GPD	LOS001	LOS ANGELES CONSTRUCTION CO.	0
12	JAH	KAN001	KANSAS CITY GEODESIC HOMES	0
13	PRT	GRE001	GREATER NEW YORK DOMES, INC.	0
14	PRT	SUN001	SUNSHINE HOMES, INC.	0
15				
16				
17				
18				

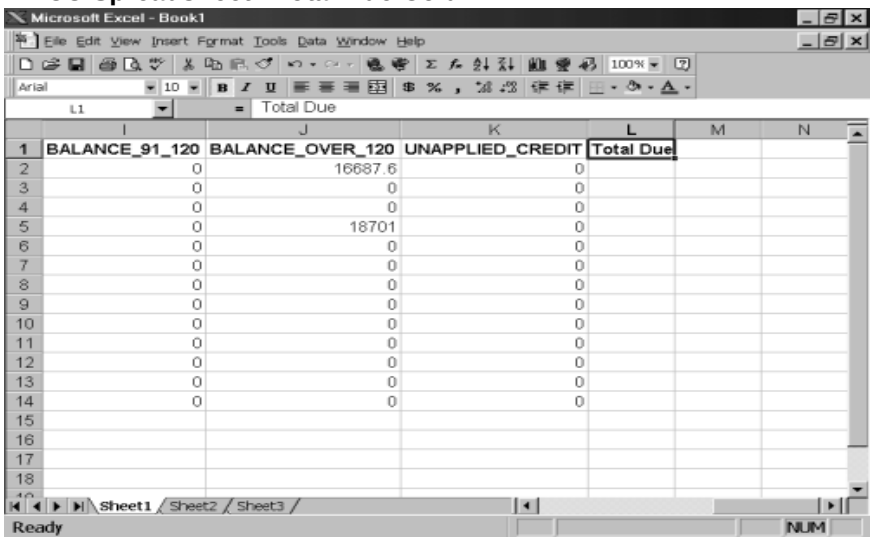
Step 3: Formatting the Columns

The next step is to create a column that calculates the total amount due.

*Select the first cell in the first blank column (Cell L1 in this example), type **Total Due** and make it bold.*

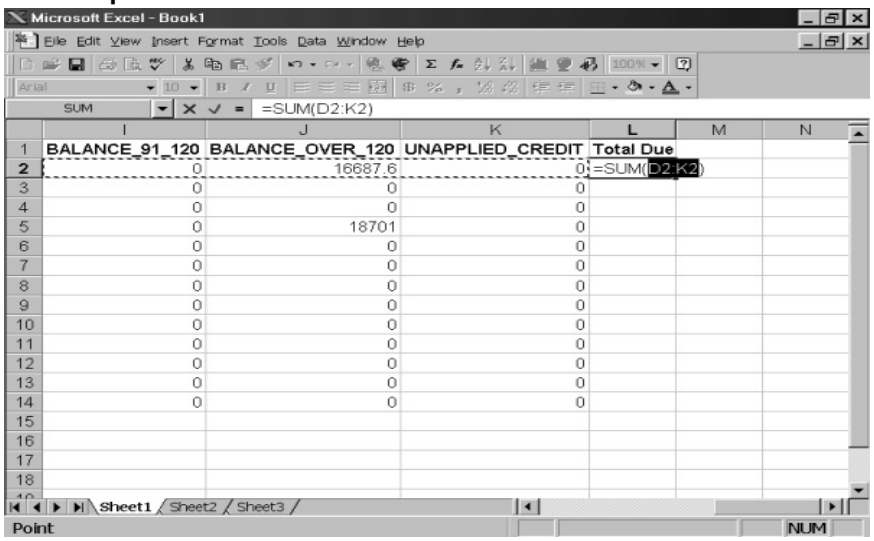
You can change the column heading for the OSAS fields also.

ARCU Spreadsheet - Total Due Column



	I	J	K	L	M	N
1	BALANCE_91_120	BALANCE_OVER_120	UNAPPLIED_CREDIT	Total Due		
2	0	16687.6	0			
3	0	0	0			
4	0	0	0			
5	0	18701	0			
6	0	0	0			
7	0	0	0			
8	0	0	0			
9	0	0	0			
10	0	0	0			
11	0	0	0			
12	0	0	0			
13	0	0	0			
14	0	0	0			
15						
16						
17						
18						

ARCU Spreadsheet - Total Due Column

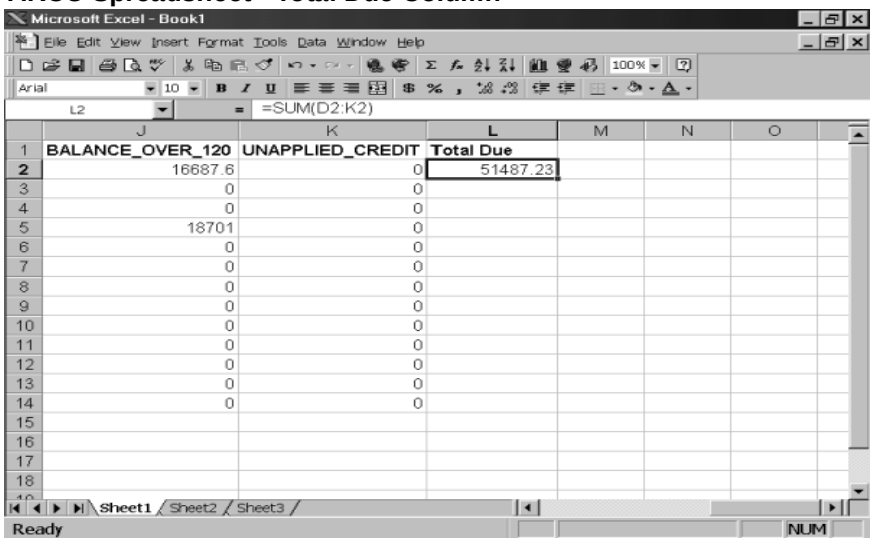


Select the cell below the Total Due heading (cell L2 in this example). Create a math formula to total the New Fin Charges through Unapplied Credit fields.

You can use the AutoSum function to total the cells or type in the formula

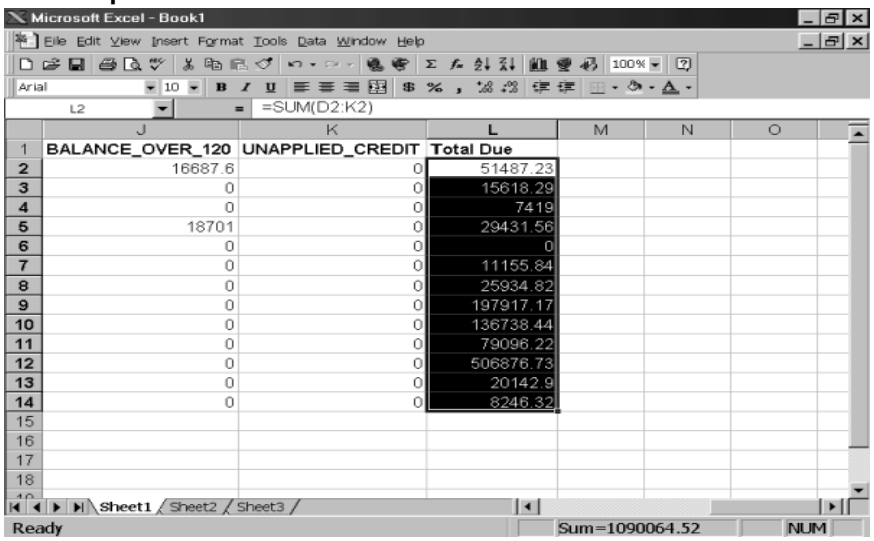
Enter the following formula ***=SUM(D2:K2)***.

ARCU Spreadsheet - Total Due Column



Press **Enter** to display the total for the calculation

ARCU Spreadsheet - Total Due Column

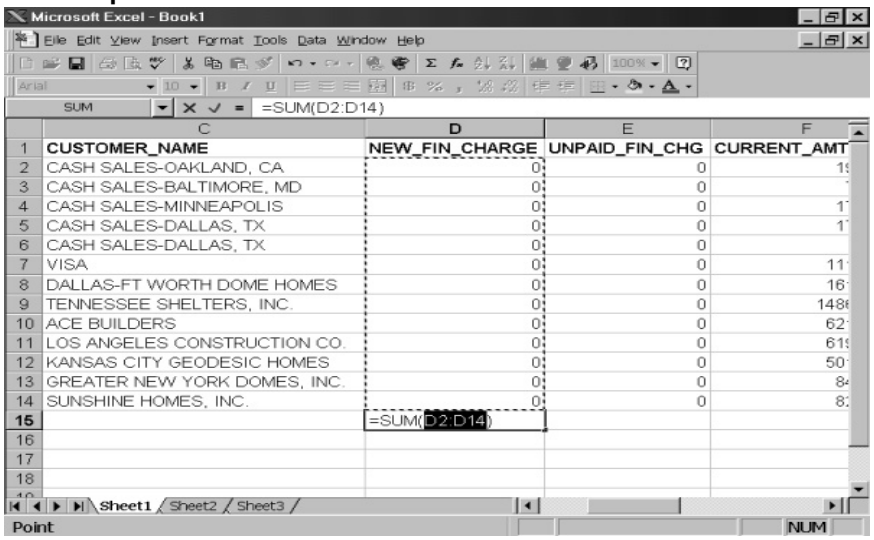


	J	K	L	M	N	O
1	BALANCE_OVER_120	UNAPPLIED_CREDIT	Total Due			
2	16687.6	0	51487.23			
3	0	0	15618.29			
4	0	0	7419			
5	18701	0	29431.56			
6	0	0	0			
7	0	0	11155.84			
8	0	0	25934.82			
9	0	0	197917.17			
10	0	0	136738.44			
11	0	0	79096.22			
12	0	0	506876.73			
13	0	0	20142.9			
14	0	0	8246.32			
15						
16						
17						
18						

Next, calculate the total due amount for the remaining cells in the Total Due column. There are several options to create the total. Enter the formula in each cell below **L2** or use the *AutoSum* function for each cell.

You can let Excel create the formula in the remaining cells. Select cell **L2**. Move the cursor to the lower right corner of the cell, until the cursor changes into a bold plus. Double click the corner to fill the remaining cells, or click and drag the bold plus down until the necessary cells are filled.

ARCU Spreadsheet – Total for each Column



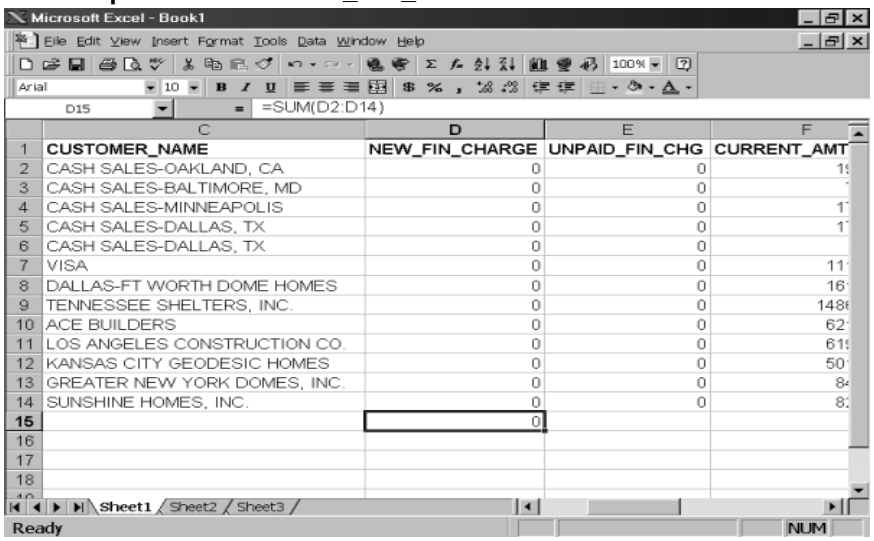
	C	D	E	F
1	CUSTOMER_NAME	NEW_FIN_CHARGE	UNPAID_FIN_CHG	CURRENT_AMT
2	CASH SALES-OAKLAND, CA	0	0	1
3	CASH SALES-BALTIMORE, MD	0	0	
4	CASH SALES-MINNEAPOLIS	0	0	1
5	CASH SALES-DALLAS, TX	0	0	1
6	CASH SALES-DALLAS, TX	0	0	
7	VISA	0	0	11
8	DALLAS-FT WORTH DOME HOMES	0	0	16
9	TENNESSEE SHELTERS, INC.	0	0	148
10	ACE BUILDERS	0	0	62
11	LOS ANGELES CONSTRUCTION CO.	0	0	61
12	KANSAS CITY GEODESIC HOMES	0	0	50
13	GREATER NEW YORK DOMES, INC.	0	0	8
14	SUNSHINE HOMES, INC.	0	0	8
15		=SUM(D2:D14)		
16				
17				
18				

Next, create a total for each of the balance amounts and a grand Total Due.

Select the first blank cell in the New Fin Charge column, cell **D15** in this example. Use the *AutoSum* function to total cells **D2** through **D14** or enter a formula to total these cells.

Enter the following formula **=SUM(D2:D14)**

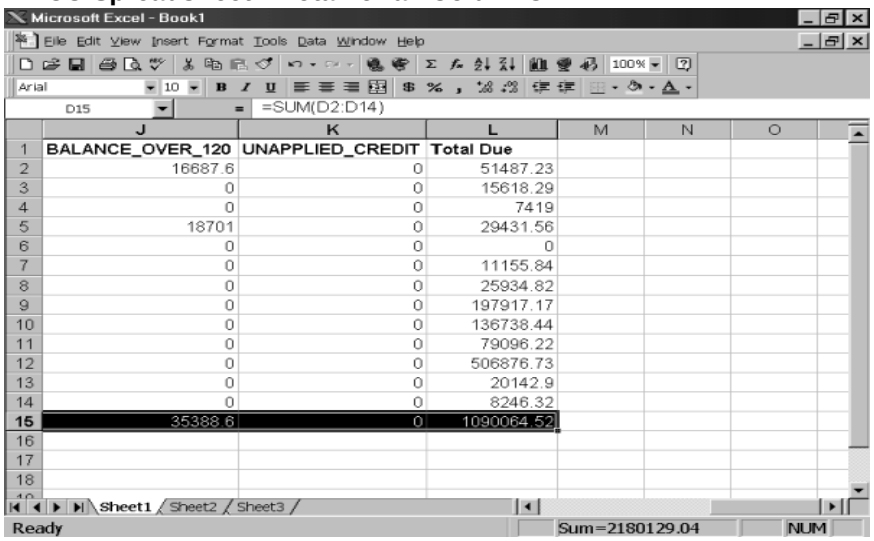
ARCU Spreadsheet – NEW_FIN_CHARGE Total



	C	D	E	F
1	CUSTOMER_NAME	NEW_FIN_CHARGE	UNPAID_FIN_CHG	CURRENT_AMT
2	CASH SALES-OAKLAND, CA	0	0	1
3	CASH SALES-BALTIMORE, MD	0	0	
4	CASH SALES-MINNEAPOLIS	0	0	1
5	CASH SALES-DALLAS, TX	0	0	1
6	CASH SALES-DALLAS, TX	0	0	
7	VISA	0	0	11
8	DALLAS-FT WORTH DOME HOMES	0	0	16
9	TENNESSEE SHELTERS, INC.	0	0	148
10	ACE BUILDERS	0	0	62
11	LOS ANGELES CONSTRUCTION CO.	0	0	61
12	KANSAS CITY GEODESIC HOMES	0	0	50
13	GREATER NEW YORK DOMES, INC.	0	0	8
14	SUNSHINE HOMES, INC.	0	0	8
15		0		
16				
17				
18				

Press **Enter** to display the total for the calculation.

ARCU Spreadsheet – Total for all Columns



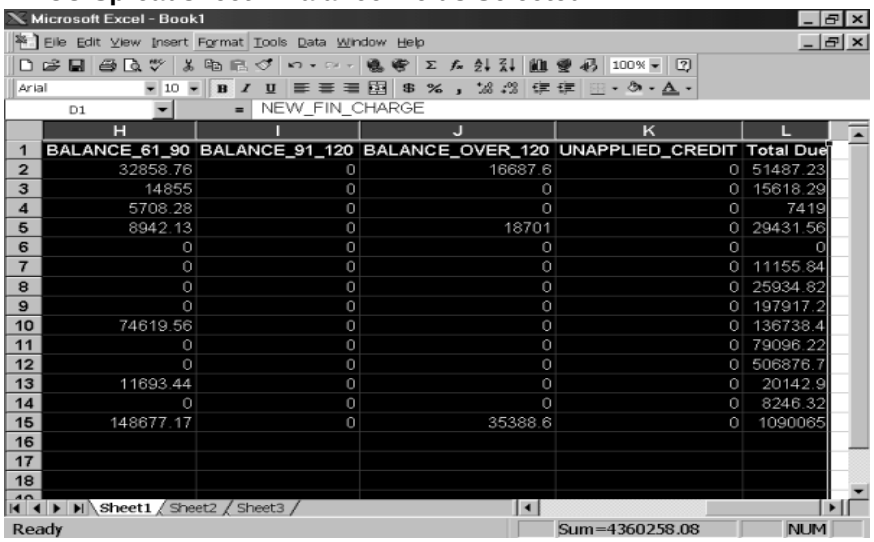
	J	K	L	M	N	O
1	BALANCE_OVER_120	UNAPPLIED_CREDIT	Total Due			
2	16687.6	0	51487.23			
3	0	0	15618.29			
4	0	0	7419			
5	18701	0	29431.56			
6	0	0	0			
7	0	0	11155.84			
8	0	0	25934.82			
9	0	0	197917.17			
10	0	0	136738.44			
11	0	0	79096.22			
12	0	0	506876.73			
13	0	0	20142.9			
14	0	0	8246.32			
15	35388.6	0	1090064.52			
16						
17						
18						

Fill the remaining columns with the total. You can use the *AutoSum* function for each column or enter the formula for each column.

You can also move the cursor to the lower right corner of **D15** until the cursor changes to a bold plus. Click and drag the cell across until you are at cell **L15** to fill the remaining cells with the total.

You can format the cells to show the information in different ways.

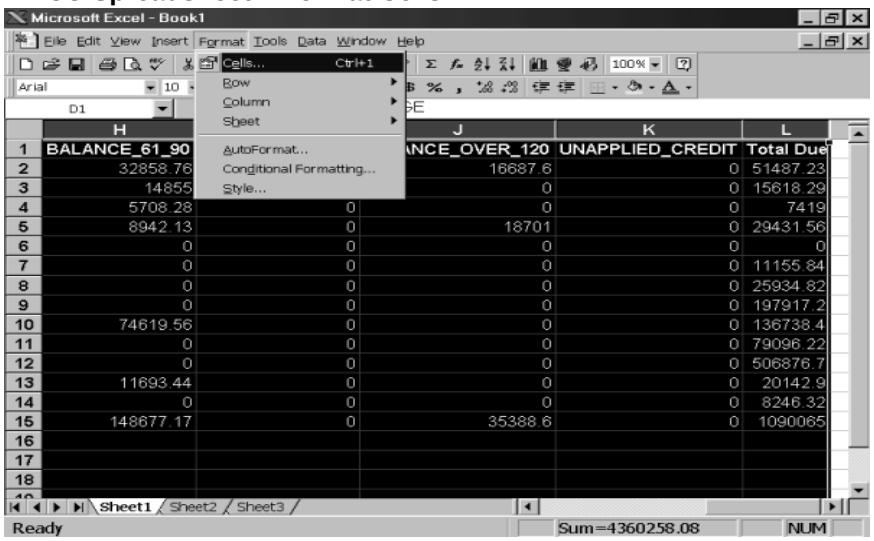
ARCU Spreadsheet – Balance Fields Selected



	H	I	J	K	L
1	BALANCE_61_90	BALANCE_91_120	BALANCE_OVER_120	UNAPPLIED_CREDIT	Total Due
2	32858.76	0	16687.6	0	51487.23
3	14855	0	0	0	15618.29
4	5708.28	0	0	0	7419
5	8942.13	0	18701	0	29431.56
6	0	0	0	0	0
7	0	0	0	0	11155.84
8	0	0	0	0	25934.82
9	0	0	0	0	197917.2
10	74619.56	0	0	0	136738.4
11	0	0	0	0	79096.22
12	0	0	0	0	506876.7
13	11693.44	0	0	0	20142.9
14	0	0	0	0	8246.32
15	148677.17	0	35388.6	0	1090065
16					
17					
18					

Highlight all the balance columns and the Total Due column or highlight cells **D2** through **L15**.

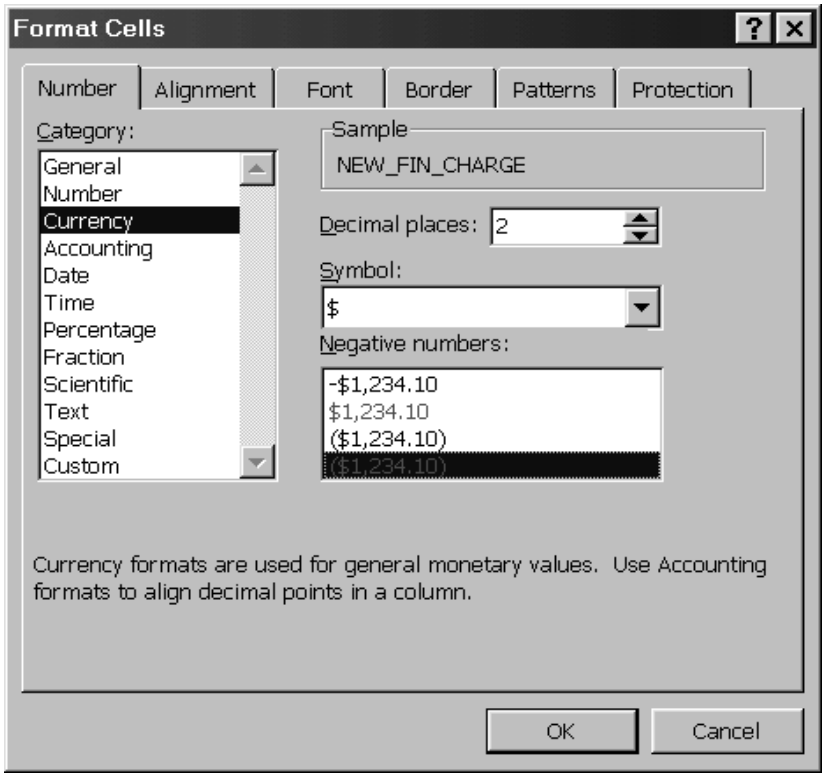
ARCU Spreadsheet – Format Cells



	H	J	K	L
1	BALANCE_61_90	NCE_OVER_120	UNAPPLIED_CREDIT	Total Due
2	32858.76	16687.6	0	51487.23
3	14855	0	0	15618.29
4	5708.28	0	0	7419
5	8942.13	18701	0	29431.56
6	0	0	0	0
7	0	0	0	11155.84
8	0	0	0	25934.82
9	0	0	0	197917.2
10	74619.56	0	0	136738.4
11	0	0	0	79096.22
12	0	0	0	506876.7
13	11693.44	0	0	20142.9
14	0	0	0	8246.32
15	148677.17	35388.6	0	1090065
16				
17				
18				

Select Cells from the Format menu or right click and select Format followed by Cells.

Format Cells

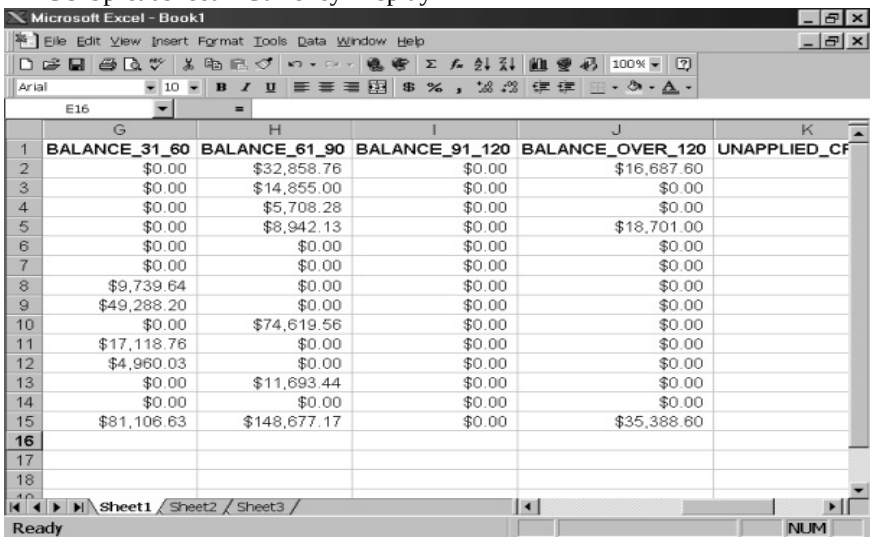


The Format Cells dialog box is displayed.

Select the Number tab.

Select Currency; accept the default Decimal places and Symbol. Choose how you want negative number to display and click OK.

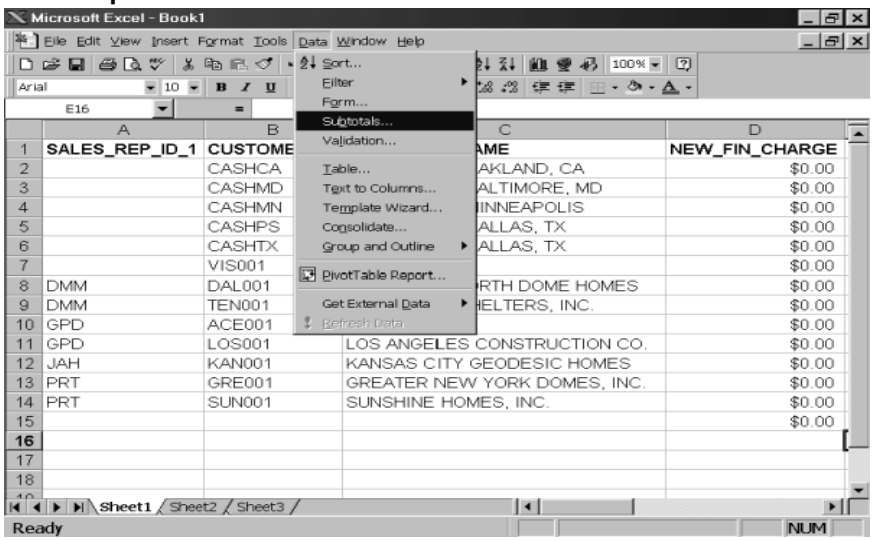
ARCU Spreadsheet – Currency Display



	G	H	I	J	K
1	BALANCE_31_60	BALANCE_61_90	BALANCE_91_120	BALANCE_OVER_120	UNAPPLIED_CF
2	$0.00	$32,858.76	$0.00	$16,687.60	
3	$0.00	$14,855.00	$0.00	$0.00	
4	$0.00	$5,708.28	$0.00	$0.00	
5	$0.00	$8,942.13	$0.00	$18,701.00	
6	$0.00	$0.00	$0.00	$0.00	
7	$0.00	$0.00	$0.00	$0.00	
8	$9,739.64	$0.00	$0.00	$0.00	
9	$49,288.20	$0.00	$0.00	$0.00	
10	$0.00	$74,619.56	$0.00	$0.00	
11	$17,118.76	$0.00	$0.00	$0.00	
12	$4,960.03	$0.00	$0.00	$0.00	
13	$0.00	$11,693.44	$0.00	$0.00	
14	$0.00	$0.00	$0.00	$0.00	
15	$81,106.63	$148,677.17	$0.00	$35,388.60	
16					
17					
18					

Select the **OK** button to display amounts as currency in the spreadsheet.

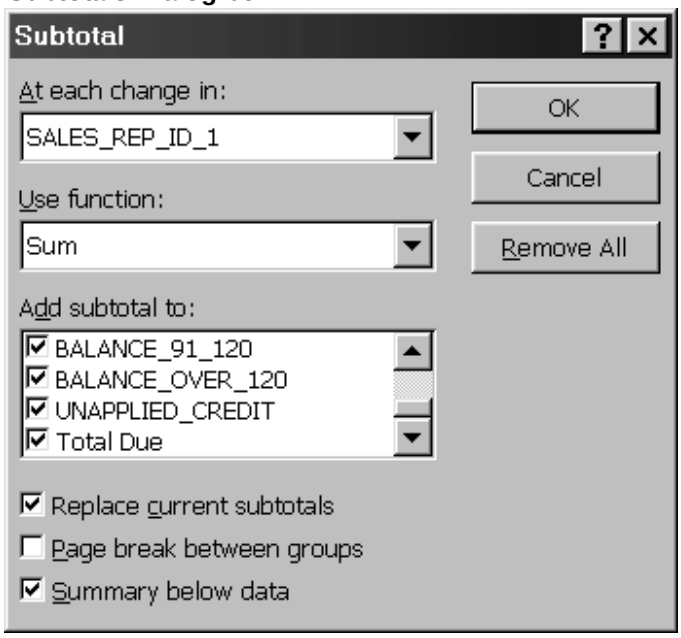
ARCU Spreadsheet – Data Menu - Subtotals



Next calculate a subtotal for each Sales Rep.

Select Subtotals from the Data menu.

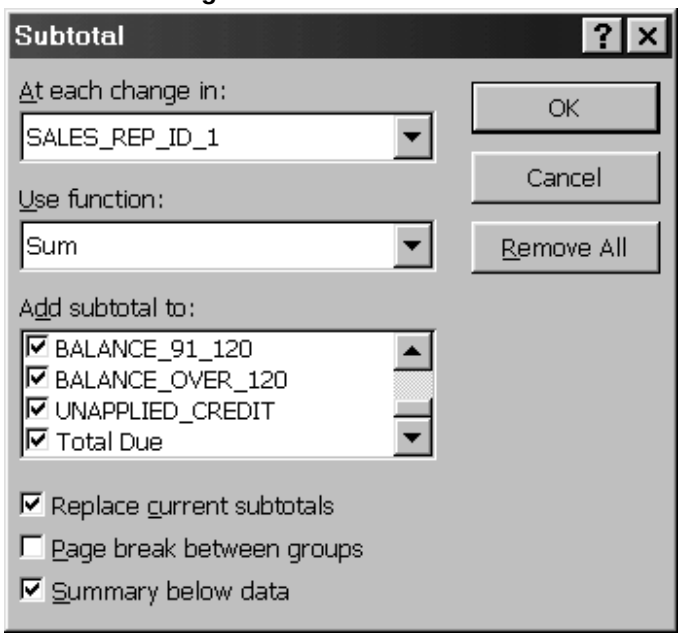
Subtotals Dialog box



The **Subtotal** dialog box displays. Enter the following information:

Field	Description
At each change in:	Select the field you want to create the subtotals for. You can select any field on the spreadsheet **Select SALES_REP_ID_1 for this spreadsheet.**
Use Function:	Select how you want to total the fields. **Select SUM for this spreadsheet**

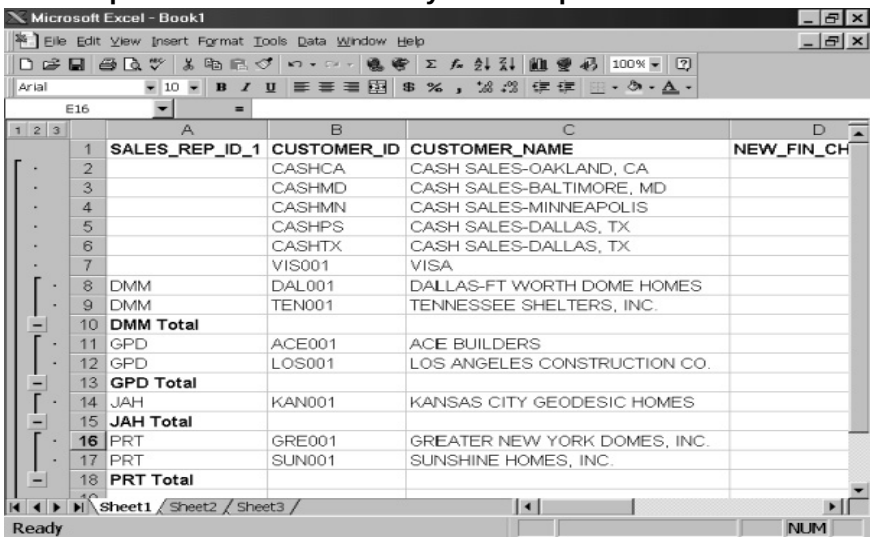
Subtotals Dialog Box



Field	Description
Add subtotal to:	Place a check next to the fields you want to create subtotals for. ***Select all the balance fields and the Total Due field.***
Replace current subtotals	Check if you want to replace any subtotals with the new ones you are creating. ***Place a check here for this spreadsheet.***
Page break between groups	Check if you want each group and subtotal on a separate page. ***Leave blank for this spreadsheet.***
Summary below data	Check if you want to subtotal below the data. ***Place a check here for this spreadsheet.***
OK	Select the OK button to exit subtotals and save the changes
Cancel	Select the Cancel button to exit subtotals without saving the changes.
Remove All	Select the Remove All button to remove any subtotals.

Select the **OK** button to return to the spreadsheet.

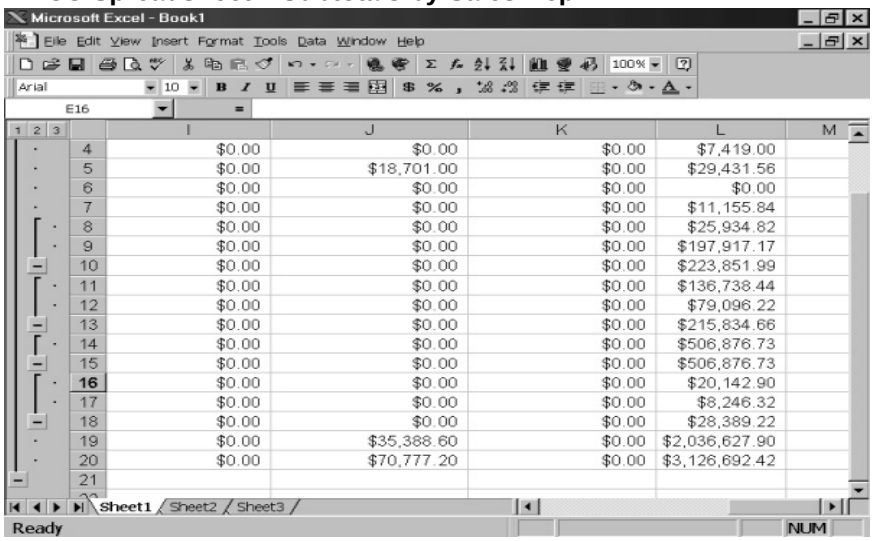
ARCU Spreadsheet – Subtotals by Sales Rep



	A	B	C	D
1	SALES_REP_ID_1	CUSTOMER_ID	CUSTOMER_NAME	NEW_FIN_CH
2		CASHCA	CASH SALES-OAKLAND, CA	
3		CASHMD	CASH SALES-BALTIMORE, MD	
4		CASHMN	CASH SALES-MINNEAPOLIS	
5		CASHPS	CASH SALES-DALLAS, TX	
6		CASHTX	CASH SALES-DALLAS, TX	
7		VIS001	VISA	
8	DMM	DAL001	DALLAS-FT WORTH DOME HOMES	
9	DMM	TEN001	TENNESSEE SHELTERS, INC.	
10	**DMM Total**			
11	GPD	ACE001	ACE BUILDERS	
12	GPD	LOS001	LOS ANGELES CONSTRUCTION CO.	
13	**GPD Total**			
14	JAH	KAN001	KANSAS CITY GEODESIC HOMES	
15	**JAH Total**			
16	PRT	GRE001	GREATER NEW YORK DOMES, INC.	
17	PRT	SUN001	SUNSHINE HOMES, INC.	
18	**PRT Total**			

Scroll to the right to see the fields selected for subtotals.

ARCU Spreadsheet – Subtotals by Sales Rep



	I	J	K	L	M
4	$0.00	$0.00	$0.00	$7,419.00	
5	$0.00	$18,701.00	$0.00	$29,431.56	
6	$0.00	$0.00	$0.00	$0.00	
7	$0.00	$0.00	$0.00	$11,155.84	
8	$0.00	$0.00	$0.00	$25,934.82	
9	$0.00	$0.00	$0.00	$197,917.17	
10	$0.00	$0.00	$0.00	$223,851.99	
11	$0.00	$0.00	$0.00	$136,738.44	
12	$0.00	$0.00	$0.00	$79,096.22	
13	$0.00	$0.00	$0.00	$215,834.66	
14	$0.00	$0.00	$0.00	$506,876.73	
15	$0.00	$0.00	$0.00	$506,876.73	
16	$0.00	$0.00	$0.00	$20,142.90	
17	$0.00	$0.00	$0.00	$8,246.32	
18	$0.00	$0.00	$0.00	$28,389.22	
19	$0.00	$35,388.60	$0.00	$2,036,627.90	
20	$0.00	$70,777.20	$0.00	$3,126,692.42	
21					

General Ledger Balance Sheet

Step 1 - Planning the Spreadsheet

First step in planning the spreadsheet is to decide what fields, or columns, you want on the report. Then decide what order you want the fields in, if there will be any added fields not associated with the OSAS data such as calculated fields, how the fields should be sorted, if criteria should be used. This will also help in deciding which file(s) to use for the report.

This spreadsheet will be a GL Balance Sheet using the GLMA based on the BALA/BAL1 statement in OSAS. It will be created for period 1.

The fields on the spreadsheet will be the Account Number, Description, Debit/Credit/Memo Switch, Actual Beginning Balance, Actual Balance Period 1, Budget Beginning Balance, and Budget Balance Period 1. We will create calculated fields for the ending balance for period 1.

In the sample data:

Accounts 100000 through 199999 are asset accounts and accounts 200000 through 999700 are liability accounts.

Accounts 100000 through 109999 are Current Assets

Accounts 150000 through 159999 are Long Term Assets

Accounts 180000 through 189999 are Other Assets

Accounts 200000 through 219999 are Current Liabilities

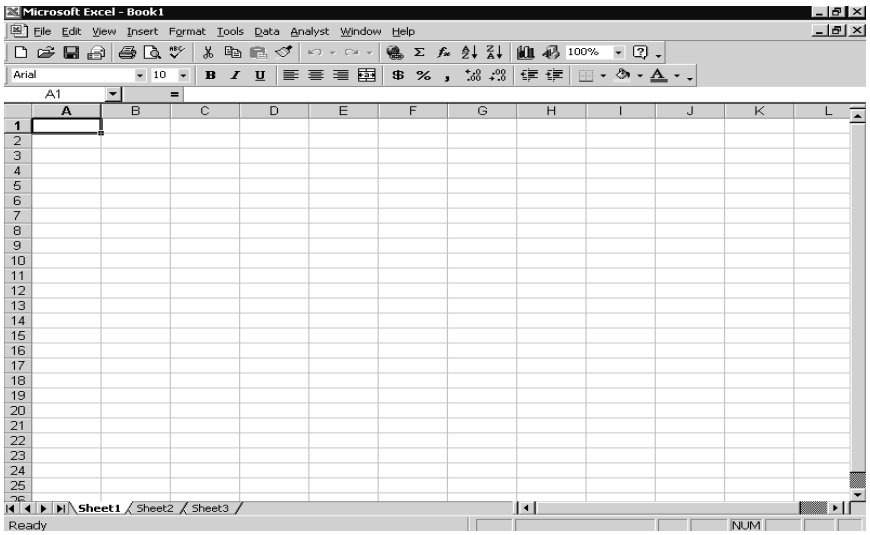
Accounts 250000 through 259999 are Long Term Liabilities

Accounts 300000 and higher are Equity Accounts.

Step 2 – Linking to the data and selecting the Columns

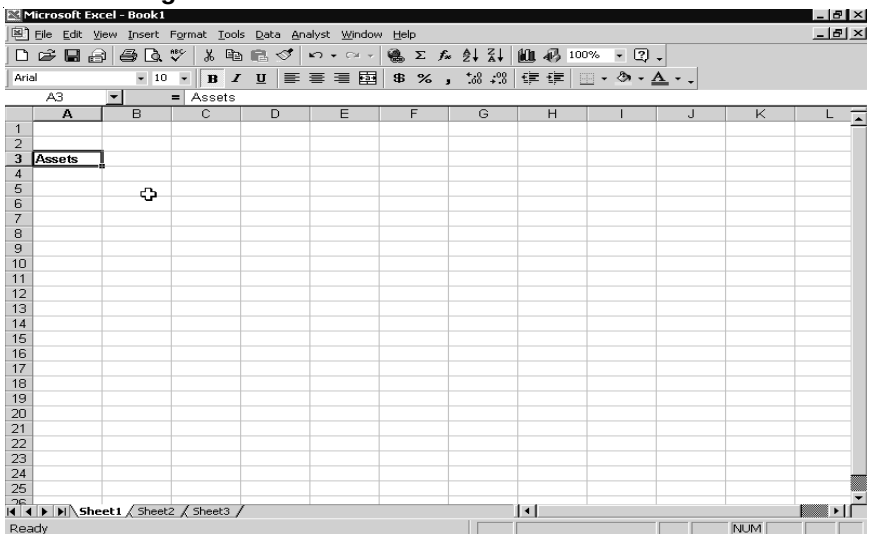
The first step is to link to the data and select the columns for the spreadsheet; however we will add some text to the spreadsheet before we add the fields.

Microsoft Excel – Blank Sheet



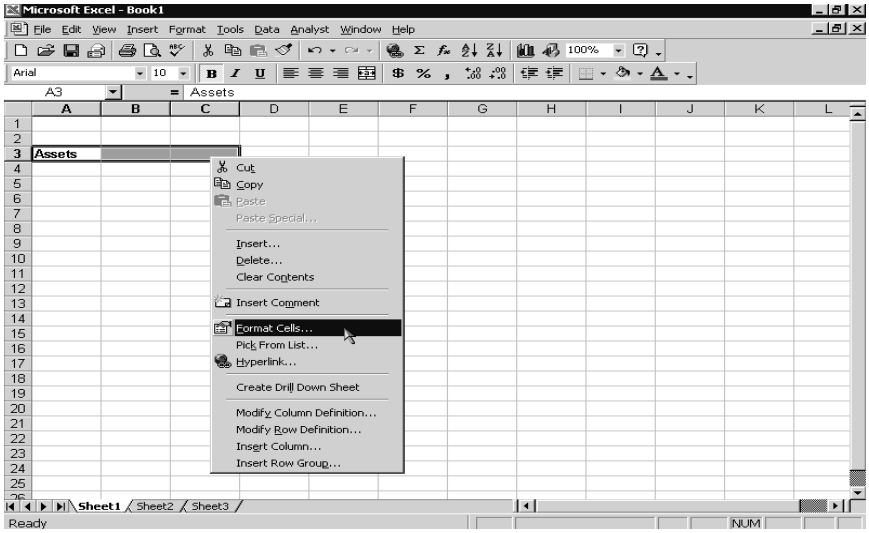
Start Microsoft Excel with a blank spreadsheet

General Ledger Balance Sheet



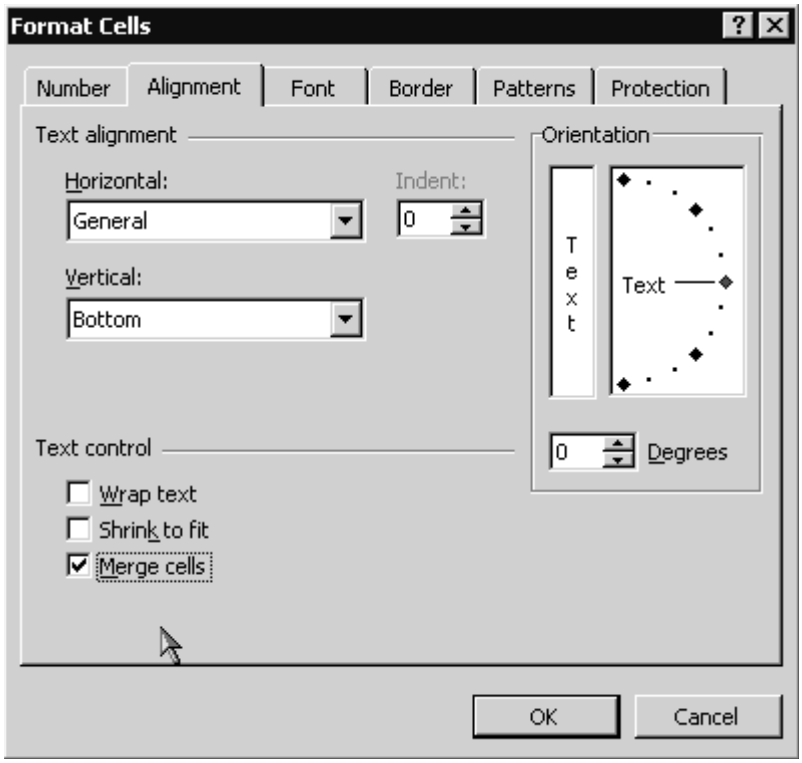
Type Assets in Cell A3 and make it bold.

General Ledger Balance Sheet



Select Cells A3 through C3. Right mouse click and select Format Cells.

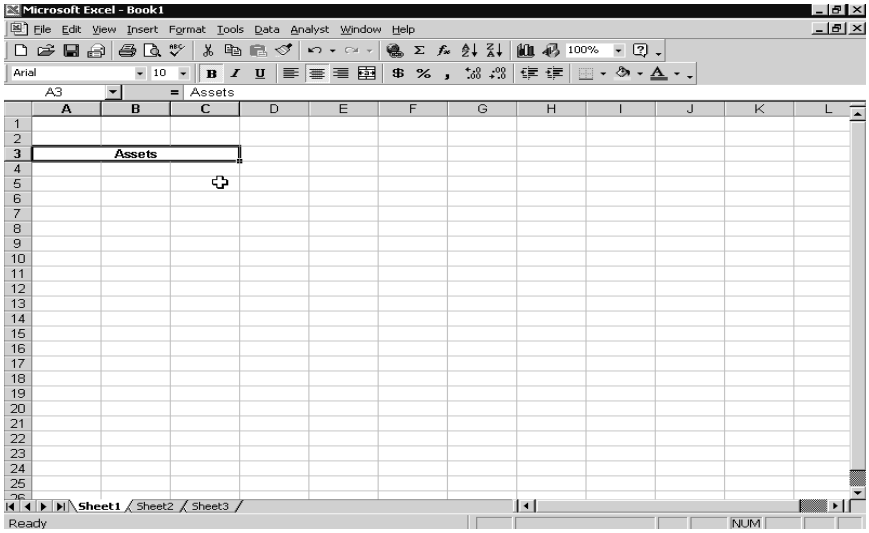
Format Cells



The Format Cells box is displayed. Select the Alignment tab and under Text control check the Merge cells box.

Click OK

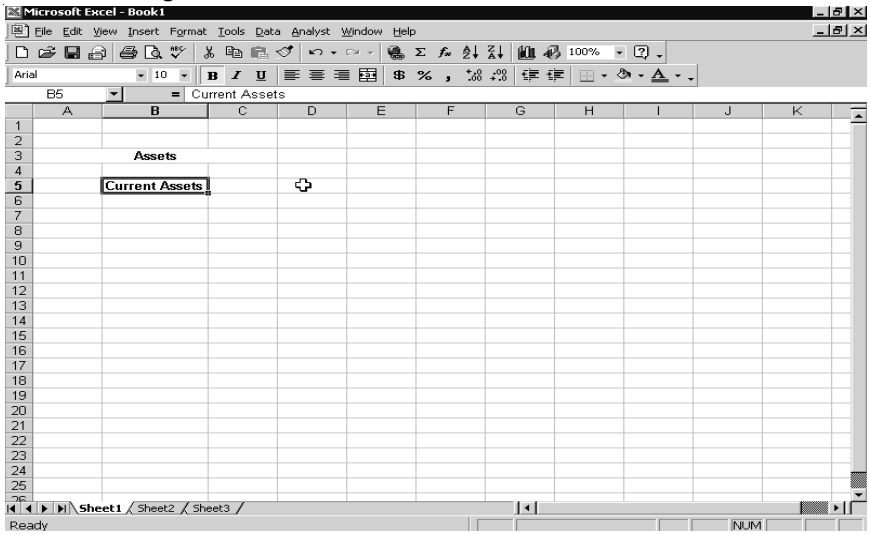
General Ledger Balance Sheet



The cells are now merged into one cell.

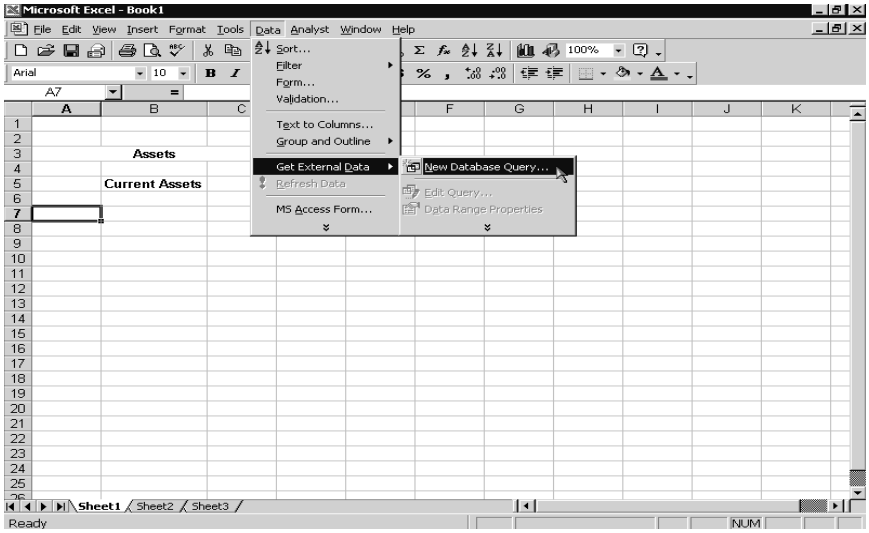
Center the word Assets

General Ledger Balance Sheet



Two rows below Assets in Column B (cell B5 in this example) type Current Assets and make the words bold.

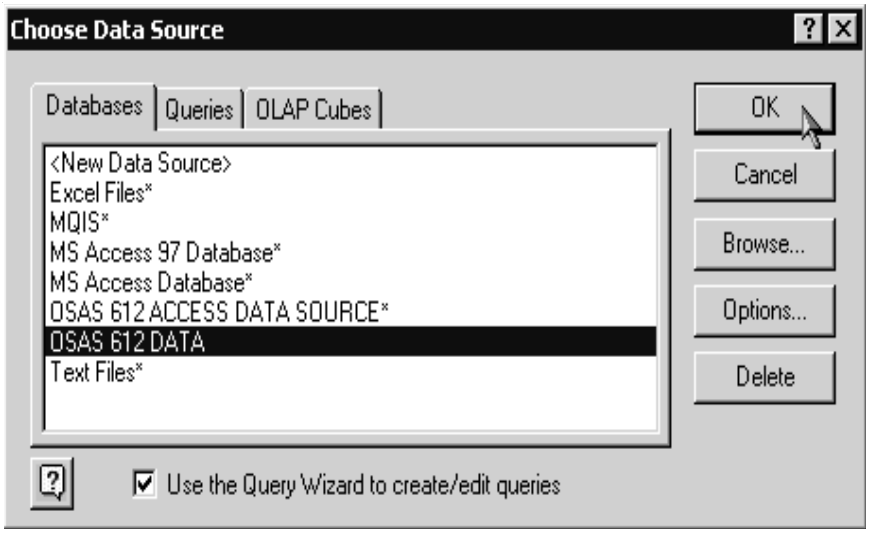
General Ledger Balance Sheet



Now we are ready to add the fields for the spreadsheet.

Click the cell two rows below Current Assets in Column A (cell A7 in this example). Select Get External Data followed by New Database Query from the Data menu.[16].

Choose Data Source



The Choose Data Source box is displayed.

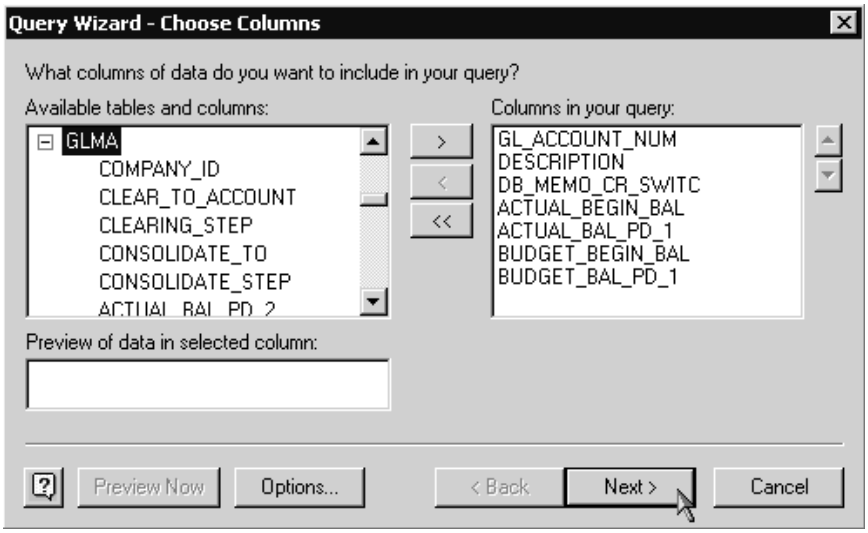
Select the data source you want to use to connect to the OSAS data and click ok. If you do not have a data source create, select <New Data Source> and click ok.

Select the OSAS 612 DATA source created earlier

Check the box for Use the Query Wizard to create/edit queries.

16.With Excel 97 select Get External Data followed by Create New query. With Excel 2002 select Import External Data followed by New Database Query.

Query Wizard – Choose Columns

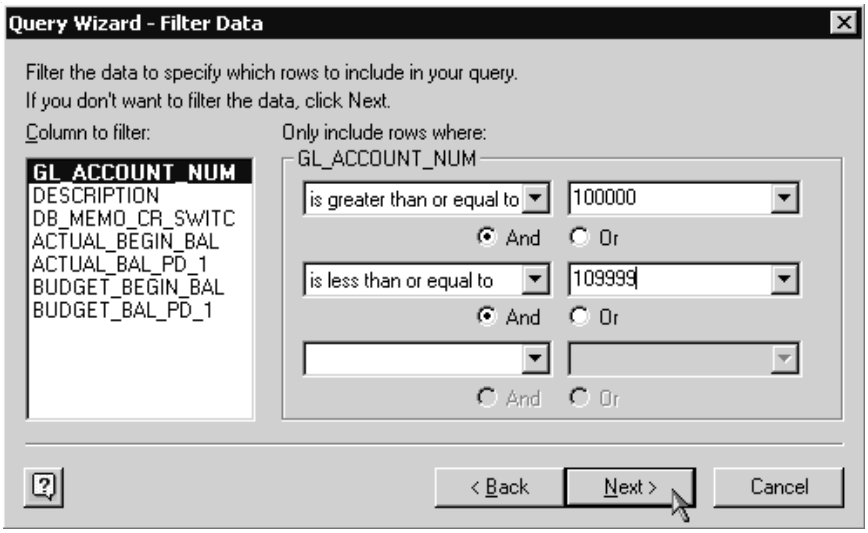


The Query Wizard – Choose Columns box is displayed. Select the table (file) and columns (fields) for the query.

For this spreadsheet, select the **GLMA** table in the Available tables and columns field. Choose the **GL_ACCOUNT_NUM**, **DESCRIPTION**, **DB_MEMO_CR_SWITC**, **ACTUAL_BEGIN_BAL**, **ACTUAL_BAL_PD_1**, **BUDGET_BEGIN_BAL**, and **BUDGET_BAL_PD_1** columns.

Click the Next button.

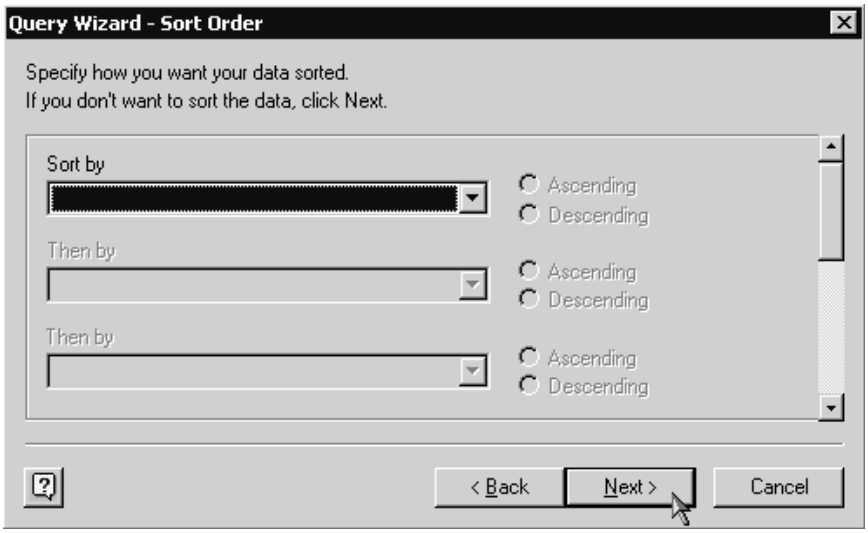
Query Wizard – Filter Data



The Query Wizard – Filter Data box is displayed.Select which fields (if any) on which to establish criteria.

Select the **GL_ACCOUNT_NUM** field. In the Only include rows where section. Select **is greater than or equal** to in the first box on the first row and enter **100000** in the second box on the first row. Click And. In the first box on the second row select is **less than or equal to** and enter **109999** in the second box on the second row. Click the Next button.

Query Wizard – Sort Order



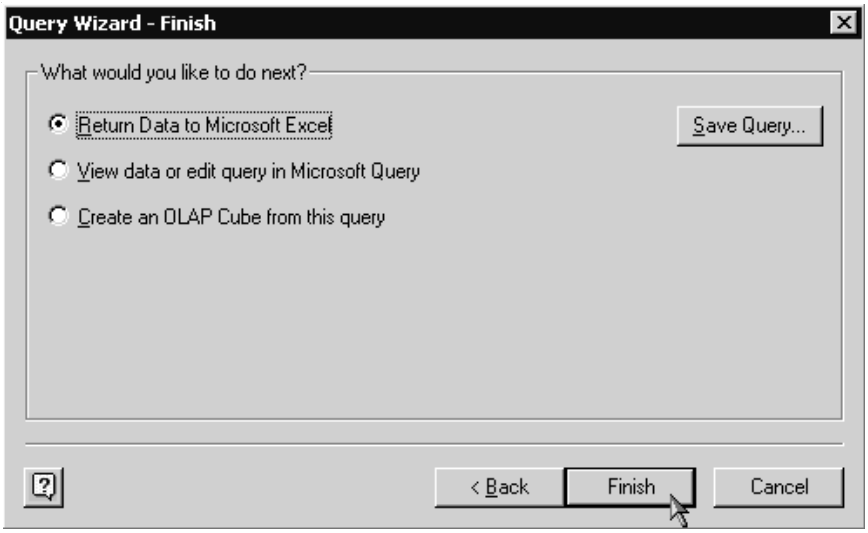
The Query Wizard – Sort Order box is displayed.

Select the order to sort the rows by.

Do not sort this spreadsheet.

Click the Next button.

Query Wizard – Finish

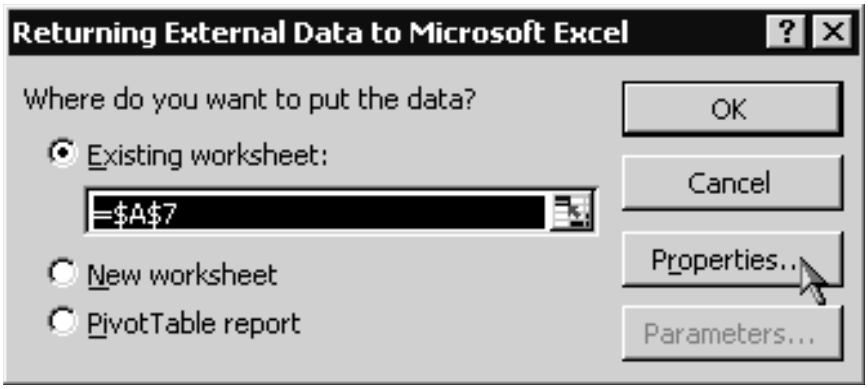


The Query Wizard – Finish box is displayed.

Select where you want to put the data.

Select Return Data to Microsoft Excel and click the Finish button.

Returning External Data to Microsoft Excel

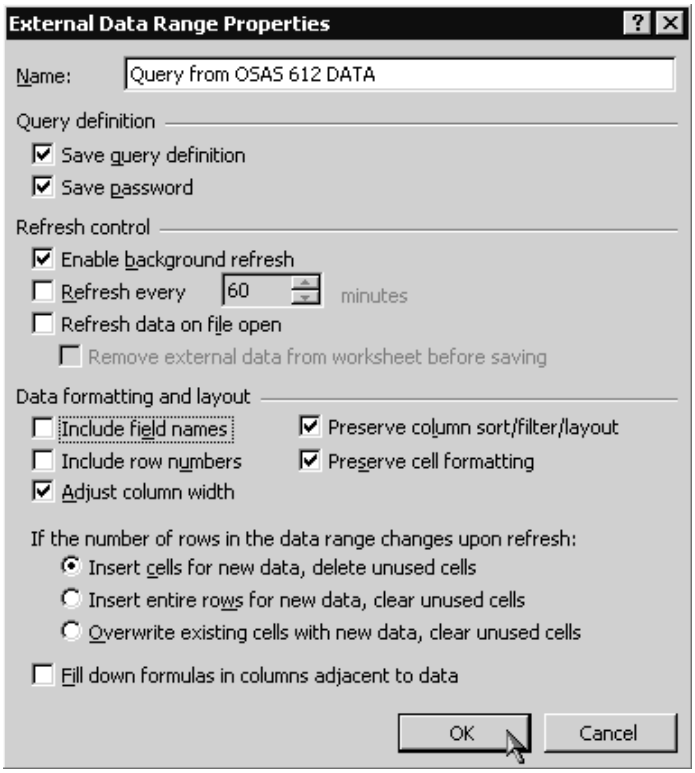


The Returning External Data to Microsoft Excel box is displayed.

Select where to place the data in Excel.

For this spreadsheet, click the Properties button.

External Data Range Properties

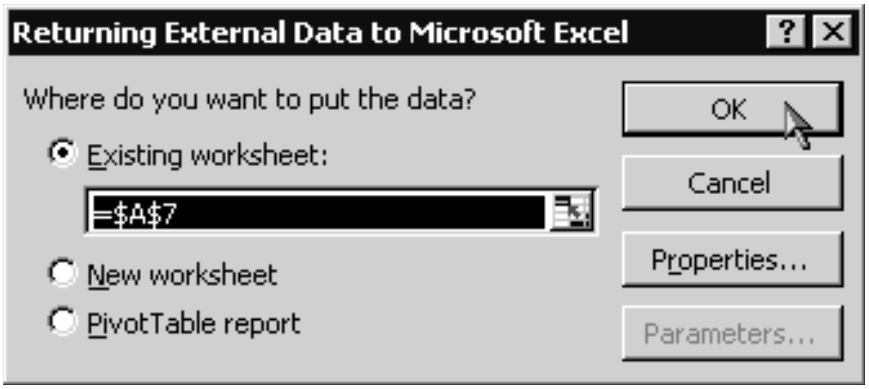


The External Data Range Properties box is displayed.

You can change the options for the Query definition section; the Refresh control section, the Data formatting and layout section, and how to fill in the data.

Uncheck the Include field names option under Data formatting and layout and click OK We will add our own field names.

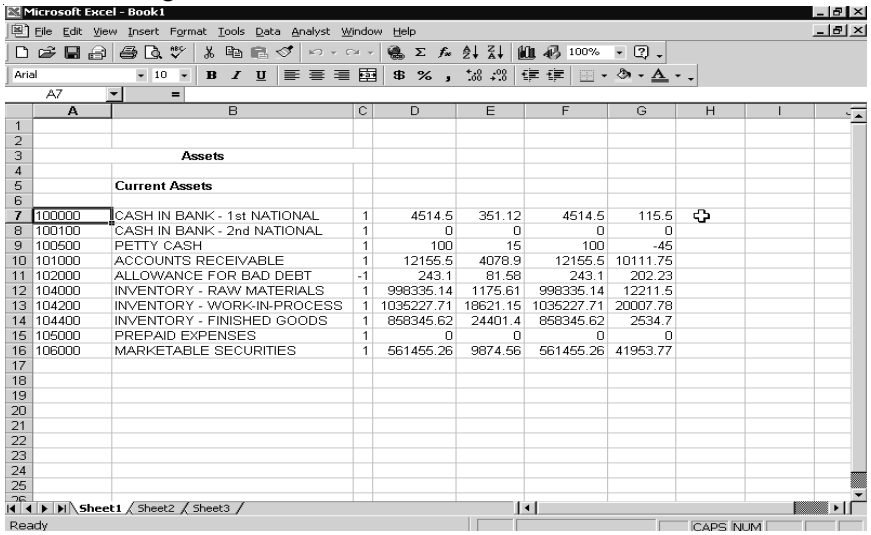
Returning External Data to Microsoft Excel



The Returning External Data to Microsoft Excel box is re-displayed.

The cell selected when we chose Get External Data should be displayed in the Existing worksheet field. Click OK.

General Ledger Balance Sheet



The data is returned from OSAS without column headings.

Column A displays GL Account

Column B displays Description,

Column C displays Debit/Credit Switch,

Column D displays Actual Beginning Balance,

Column E displays Actual Balance for Period 1

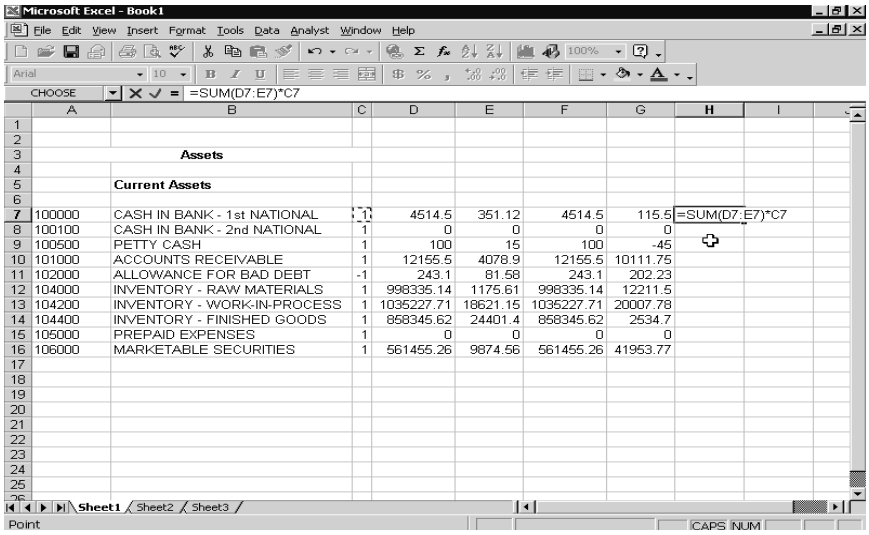
Column F displays Budget Beginning Balance

Column G displays Budget Balance for Period 1

Step 3 – Formatting the Columns and adding Excel features

Next we will create a total for the Actual and Budget Ending balances for Period 1

General Ledger Balance Sheet



In OSAS debit balances in debit accounts and credit balances in credit accounts are stored and displayed as positive numbers. Debit balances in credit accounts and credit balances in debit accounts are stored and displayed as negatives. If you create subtotals for assets and liability accounts using those numbers, you can end up with the wrong total.

In OSAS statements we use the Debit/Credit/Memo switch and the Reverse Sign to print function to determine the way numbers are displayed and calculated. In Asset accounts we want debit balances in debit account to display as positive numbers and credit balances in credit accounts to display as negative numbers.

In the Debit/Credit/Memo Switch field, a 1 means the account is a debit account and normally carries a debit balance, a -1 means the account is a credit account and normally carries a credit balance, and a 0 means the account is a memo account and carries no financial balance.

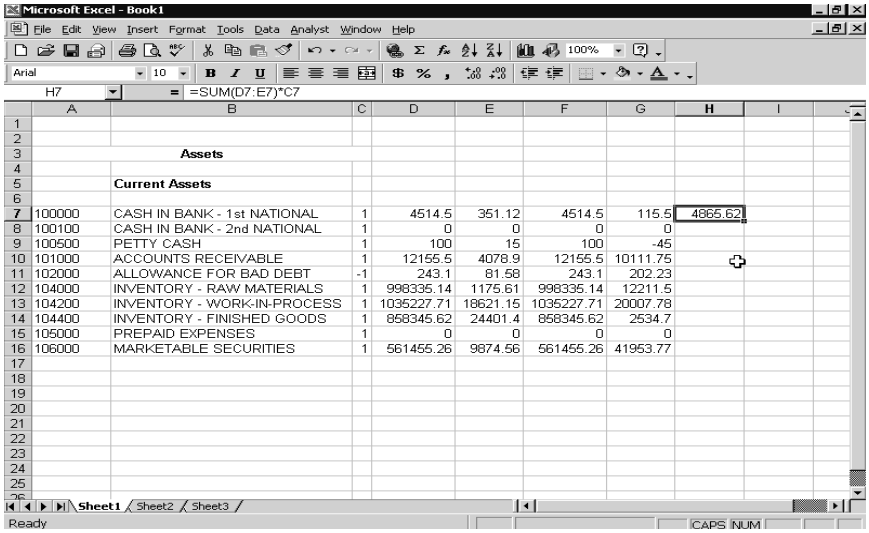
In Excel we will use the Debit/Credit/Memo Switch field to calculate our ending balances and create the subtotals correctly.

Use the Debit/Memo/Credit Switch, Actual Beginning Balance and Actual Balance Period 1 fields to create a calculated field adding the balances together and displaying them as debit or credit totals based on the type of account.

Select the first blank column (Column H in this example cell H7)

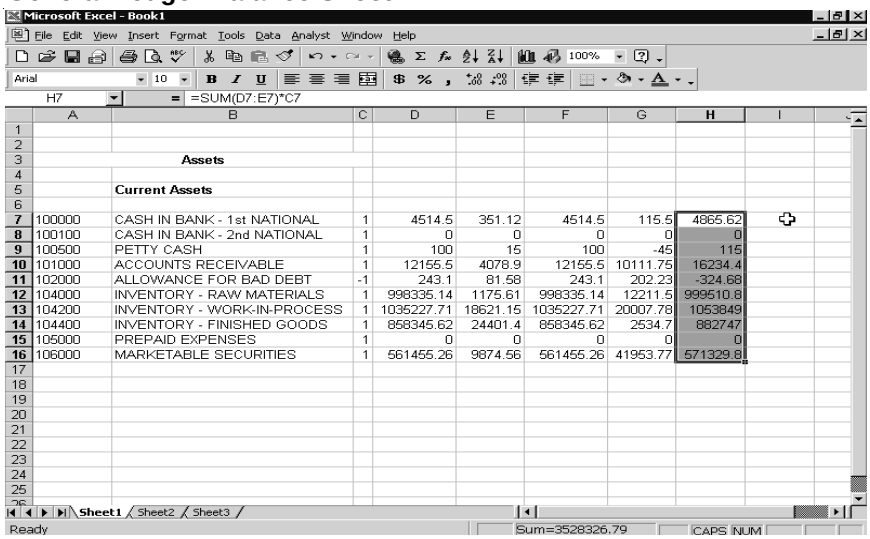
=SUM(D7:E7)*C7

General Ledger Balance Sheet



Press **Enter** to display the total for the calculation.

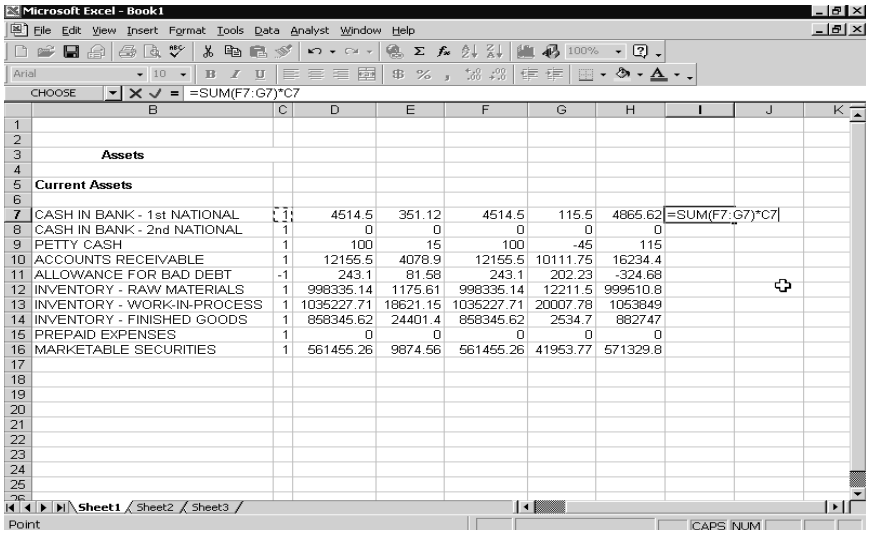
General Ledger Balance Sheet



Fill the remaining cells in column H with the calculated total for actual ending balance.

The next step is to create a column to calculate the budget ending balance for period 1.

General Ledger Balance Sheet

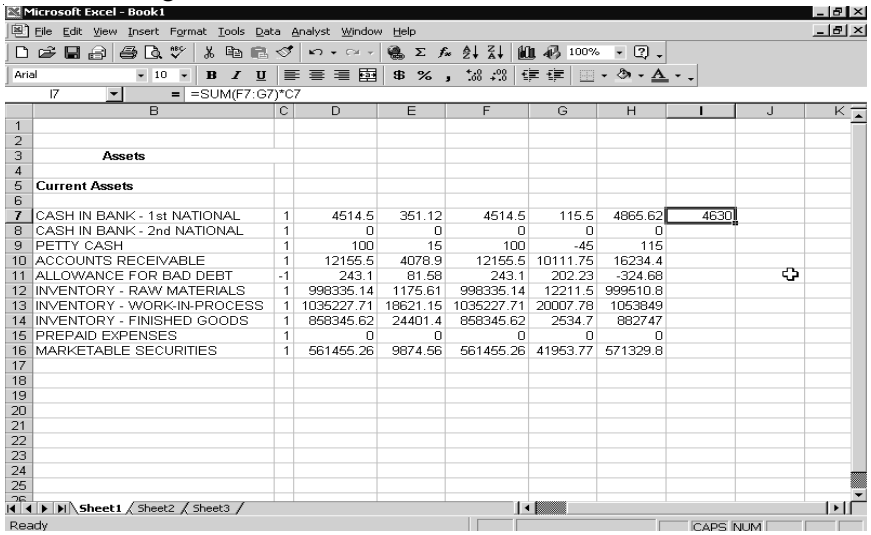


Use the Debit/Memo/Credit Switch, Budget Beginning Balance and Budget Balance Period 1 fields to create a calculated field adding the balances together and displaying them as debit or credit totals based on the type of account.

Select the next blank column (Column I, cell 7 in this example).

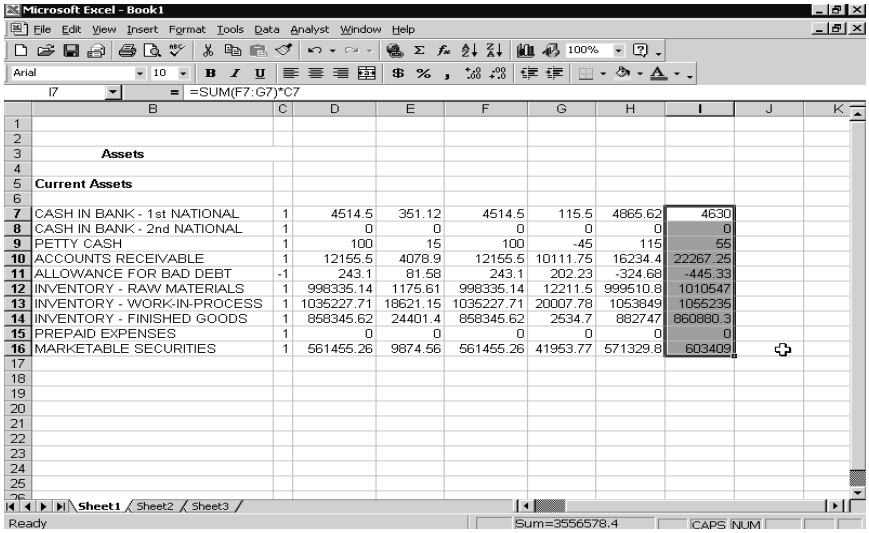
=SUM(F7:G7)*C7

General Ledger Balance Sheet



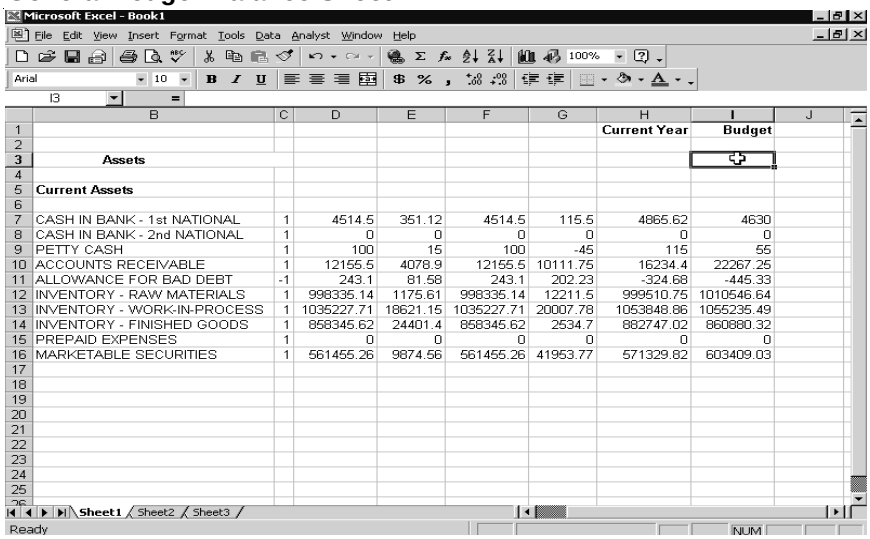
Press Enter to display the total.

General Ledger Balance Sheet



Fill the remaining cells in column I with the calculated total for budget ending balance.

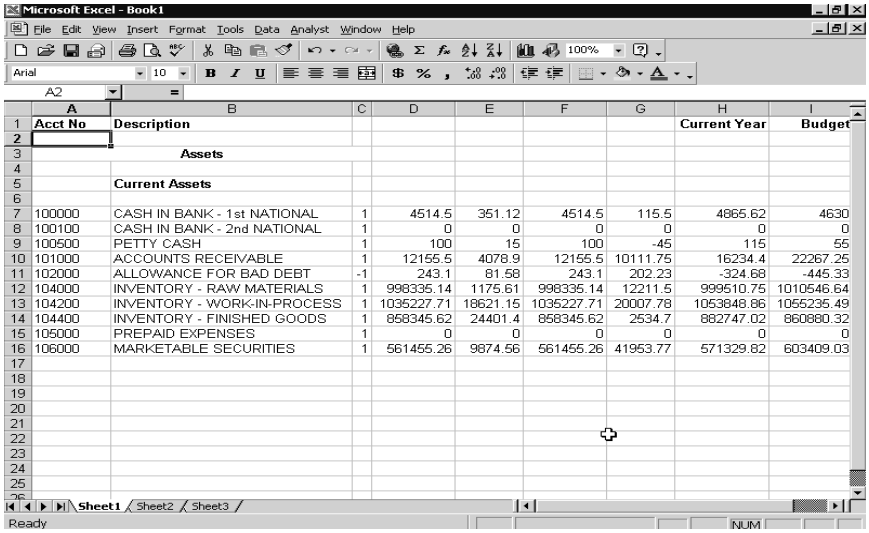
General Ledger Balance Sheet



In cells H1 and I1 create column headings for the subtotals.

For the Actual Ending Balance create a heading of Current Year and for the Budget Ending Balance create a heading of Budget. Format the cells any way you want.

General Ledger Balance Sheet



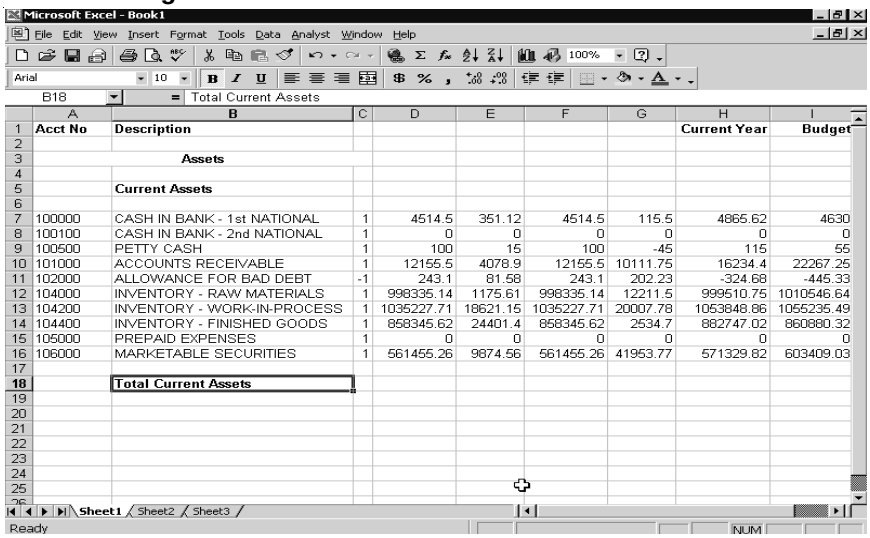
	A	B	C	D	E	F	G	H	I
1	**Acct No**	**Description**						**Current Year**	**Budget**
2									
3		**Assets**							
4									
5		**Current Assets**							
6									
7	100000	CASH IN BANK - 1st NATIONAL	1	4514.5	351.12	4514.5	115.5	4865.62	4630
8	100100	CASH IN BANK - 2nd NATIONAL	1	0	0	0	0	0	0
9	100500	PETTY CASH	1	100	15	100	-45	115	55
10	101000	ACCOUNTS RECEIVABLE	1	12155.5	4078.9	12155.5	10111.75	16234.4	22267.25
11	102000	ALLOWANCE FOR BAD DEBT	-1	243.1	81.58	243.1	202.23	-324.68	-445.33
12	104000	INVENTORY - RAW MATERIALS	1	998335.14	1175.61	998335.14	12211.5	999510.75	1010546.64
13	104200	INVENTORY - WORK-IN-PROCESS	1	1035227.71	18621.15	1035227.71	20007.78	1053848.86	1055235.49
14	104400	INVENTORY - FINISHED GOODS	1	858345.62	24401.4	858345.62	2534.7	882747.02	860880.32
15	105000	PREPAID EXPENSES	1	0	0	0	0	0	0
16	106000	MARKETABLE SECURITIES	1	561455.26	9874.56	561455.26	41953.77	571329.82	603409.03
17									
18									
19									
20									
21									
22									
23									
24									
25									

In cells A1 and B1 create column headings for the Account Number and Description fields. Format the fields any way you want.

Columns C through G will eventually be hidden so do not create column heading for those columns.

Next create subtotals for the Current Asset accounts.

General Ledger Balance Sheet

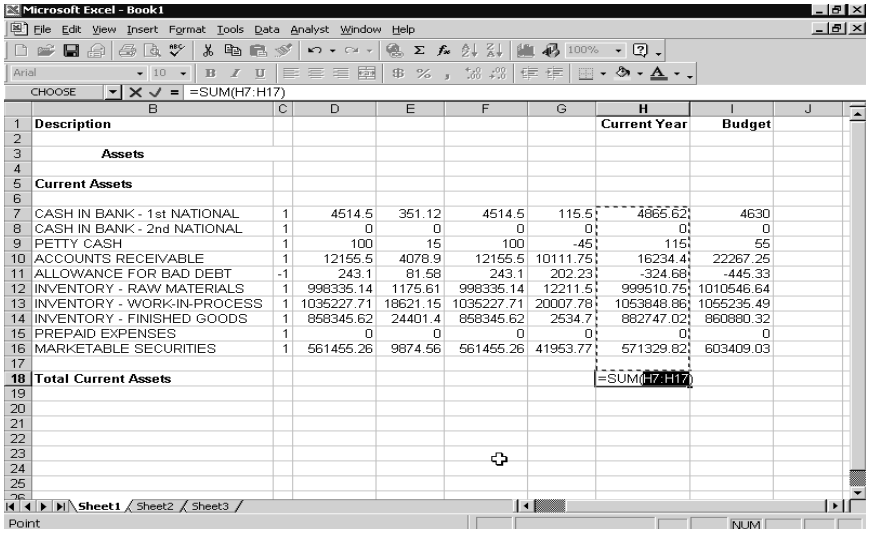


	A	B	C	D	E	F	G	H	I
1	**Acct No**	**Description**						**Current Year**	**Budget**
2									
3		**Assets**							
4									
5		**Current Assets**							
6									
7	100000	CASH IN BANK - 1st NATIONAL	1	4514.5	351.12	4514.5	115.5	4865.62	4630
8	100100	CASH IN BANK - 2nd NATIONAL	1	0	0	0	0	0	0
9	100500	PETTY CASH	1	100	15	100	-45	115	55
10	101000	ACCOUNTS RECEIVABLE	1	12155.5	4078.9	12155.5	10111.75	16234.4	22267.25
11	102000	ALLOWANCE FOR BAD DEBT	-1	243.1	81.58	243.1	202.23	-324.68	-445.33
12	104000	INVENTORY - RAW MATERIALS	1	998335.14	1175.61	998335.14	12211.5	999510.75	1010546.64
13	104200	INVENTORY - WORK-IN-PROCESS	1	1035227.71	18621.15	1035227.71	20007.78	1053848.86	1055235.49
14	104400	INVENTORY - FINISHED GOODS	1	858345.62	24401.4	858345.62	2534.7	882747.02	860880.32
15	105000	PREPAID EXPENSES	1	0	0	0	0	0	0
16	106000	MARKETABLE SECURITIES	1	561455.26	9874.56	561455.26	41953.77	571329.82	603409.03
17									
18		**Total Current Assets**							
19									
20									
21									
22									
23									
24									
25									

In column B, leave one row blank and enter **Total Current Assets** (Cell B18 in this example).

Format the cell any way you want.

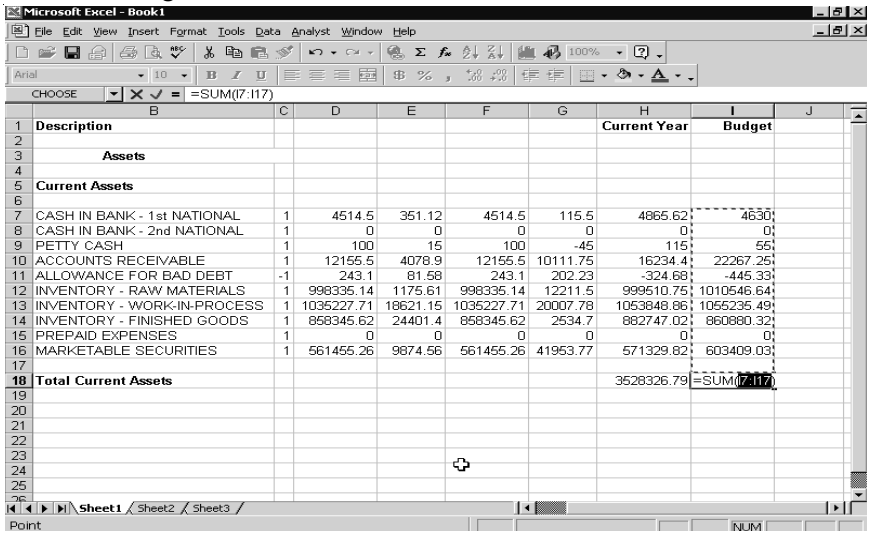
General Ledger Balance Sheet



	B	C	D	E	F	G	H	I	J
1	**Description**						**Current Year**	**Budget**	
2									
3	**Assets**								
4									
5	**Current Assets**								
6									
7	CASH IN BANK - 1st NATIONAL	1	4514.5	351.12	4514.5	115.5	4865.62	4630	
8	CASH IN BANK - 2nd NATIONAL	1	0	0	0	0	0	0	
9	PETTY CASH	1	100	15	100	-45	115	55	
10	ACCOUNTS RECEIVABLE	1	12155.5	4078.9	12155.5	10111.75	16234.4	22267.25	
11	ALLOWANCE FOR BAD DEBT	-1	243.1	81.58	243.1	202.23	-324.68	-445.33	
12	INVENTORY - RAW MATERIALS	1	998335.14	1175.61	998335.14	12211.5	999510.75	1010546.64	
13	INVENTORY - WORK-IN-PROCESS	1	1035227.71	18621.15	1035227.71	20007.78	1053848.86	1055235.49	
14	INVENTORY - FINISHED GOODS	1	858345.62	24401.4	858345.62	2534.7	882747.02	860880.32	
15	PREPAID EXPENSES	1	0	0	0	0	0	0	
16	MARKETABLE SECURITIES	1	561455.26	9874.56	561455.26	41953.77	571329.82	603409.03	
17									
18	**Total Current Assets**						=SUM(H7:H17)		
19									
20									
21									
22									
23									
24									
25									

Next to Total Current Assets in column H (cell H18 in this example) use the AutoSum function to create the Actual Current Assets total.

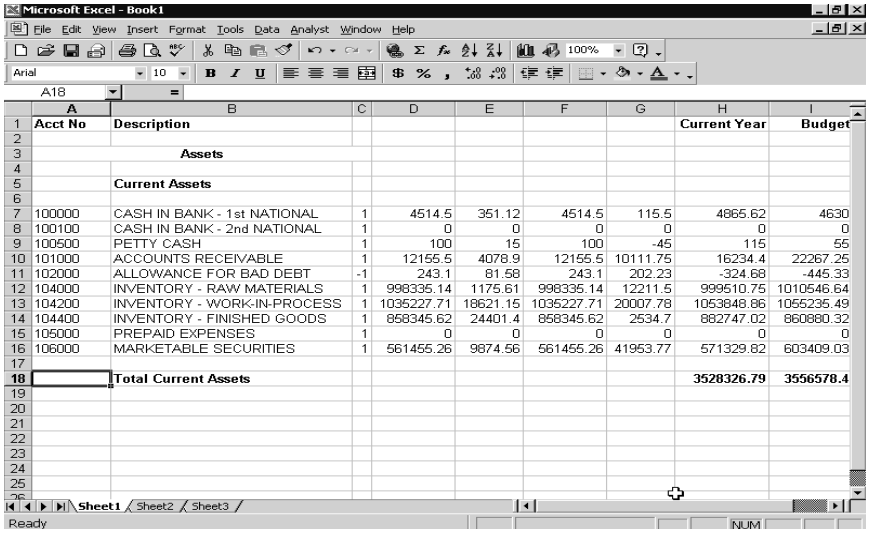
General Ledger Balance Sheet



	B	C	D	E	F	G	H	I	J
1	**Description**						**Current Year**	**Budget**	
2									
3	**Assets**								
4									
5	**Current Assets**								
6									
7	CASH IN BANK - 1st NATIONAL	1	4514.5	351.12	4514.5	115.5	4865.62	4630	
8	CASH IN BANK - 2nd NATIONAL	1	0	0	0	0	0	0	
9	PETTY CASH	1	100	15	100	-45	115	55	
10	ACCOUNTS RECEIVABLE	1	12155.5	4078.9	12155.5	10111.75	16234.4	22267.25	
11	ALLOWANCE FOR BAD DEBT	-1	243.1	81.58	243.1	202.23	-324.68	-445.33	
12	INVENTORY - RAW MATERIALS	1	998335.14	1175.61	998335.14	12211.5	999510.75	1010546.64	
13	INVENTORY - WORK-IN-PROCESS	1	1035227.71	18621.15	1035227.71	20007.78	1053848.86	1055235.49	
14	INVENTORY - FINISHED GOODS	1	858345.62	24401.4	858345.62	2534.7	882747.02	860880.32	
15	PREPAID EXPENSES	1	0	0	0	0	0	0	
16	MARKETABLE SECURITIES	1	561455.26	9874.56	561455.26	41953.77	571329.82	603409.03	
17									
18	**Total Current Assets**						3528326.79	=SUM(I7:I17)	
19									
20									
21									
22									
23									
24									
25									

Repeat the process to get the Budget Current Assets totals in column I (cell I18).

General Ledger Balance Sheet

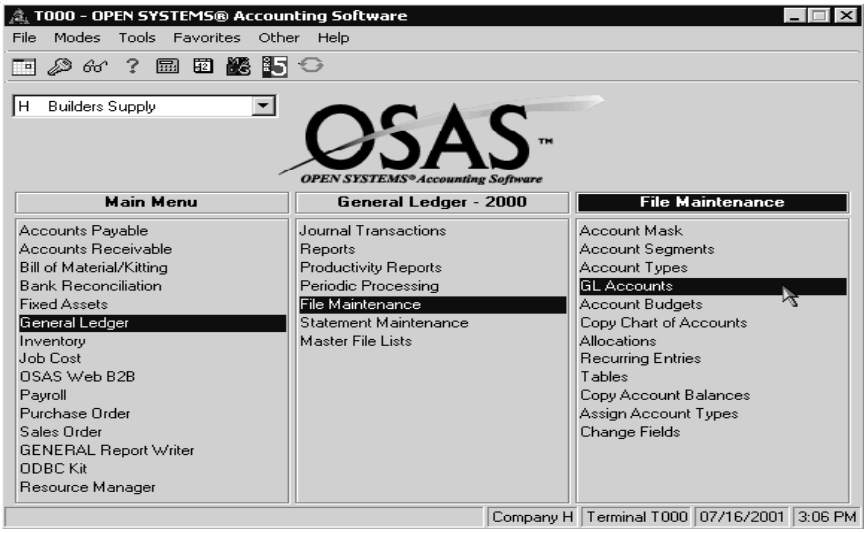


	A	B	C	D	E	F	G	H	I
1	Acct No	Description						Current Year	Budget
2									
3		Assets							
4									
5		Current Assets							
6									
7	100000	CASH IN BANK - 1st NATIONAL	1	4514.5	351.12	4514.5	115.5	4865.62	4630
8	100100	CASH IN BANK - 2nd NATIONAL	1	0	0	0	0	0	0
9	100500	PETTY CASH	1	100	15	100	-45	115	55
10	101000	ACCOUNTS RECEIVABLE	1	12155.5	4078.9	12155.5	10111.75	16234.4	22267.25
11	102000	ALLOWANCE FOR BAD DEBT	-1	243.1	81.58	243.1	202.23	-324.68	-445.33
12	104000	INVENTORY - RAW MATERIALS	1	998335.14	1175.61	998335.14	12211.5	999510.75	1010546.64
13	104200	INVENTORY - WORK-IN-PROCESS	1	1035227.71	18621.15	1035227.71	20007.78	1053848.86	1055235.49
14	104400	INVENTORY - FINISHED GOODS	1	858345.62	24401.4	858345.62	2534.7	882747.02	860880.32
15	105000	PREPAID EXPENSES	1	0	0	0	0	0	0
16	106000	MARKETABLE SECURITIES	1	561455.26	9874.56	561455.26	41953.77	571329.82	603409.03
17									
18		Total Current Assets						3528326.79	3556578.4
19									
20									
21									
22									
23									
24									
25									

Format the totals.

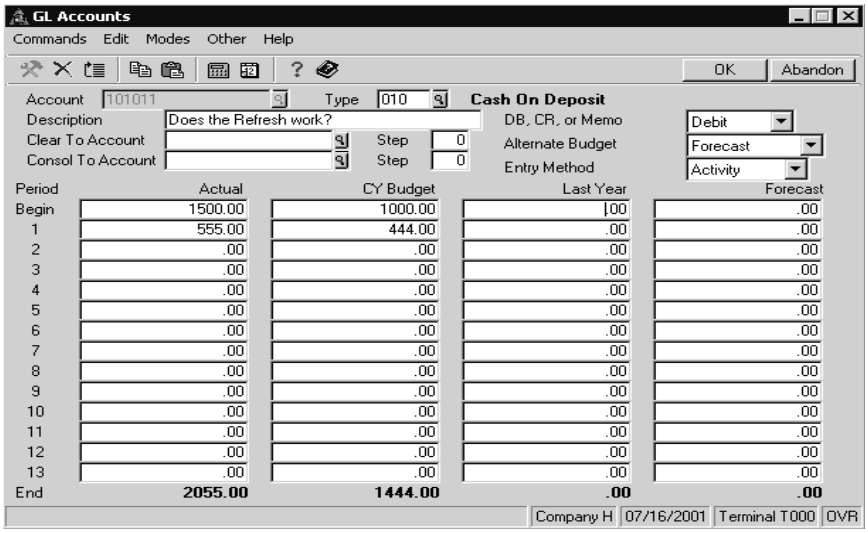
Add a GL Account in OSAS to verify the totals will update correctly.

OSAS General Ledger – File Maintenance



In Sample Data select General Ledger, File Maintenance, and GL Accounts to add a new account.

General Ledger – File Maintenance - GL Accounts

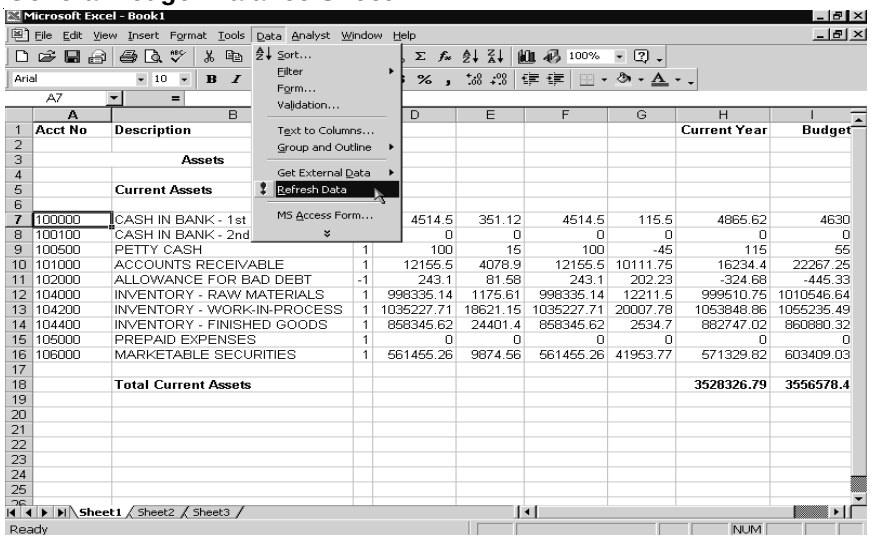


Add a new GL Account within the range of Current Asset accounts for the spreadsheet and page down to save.

Note

Remember the added account so it can be removed later.

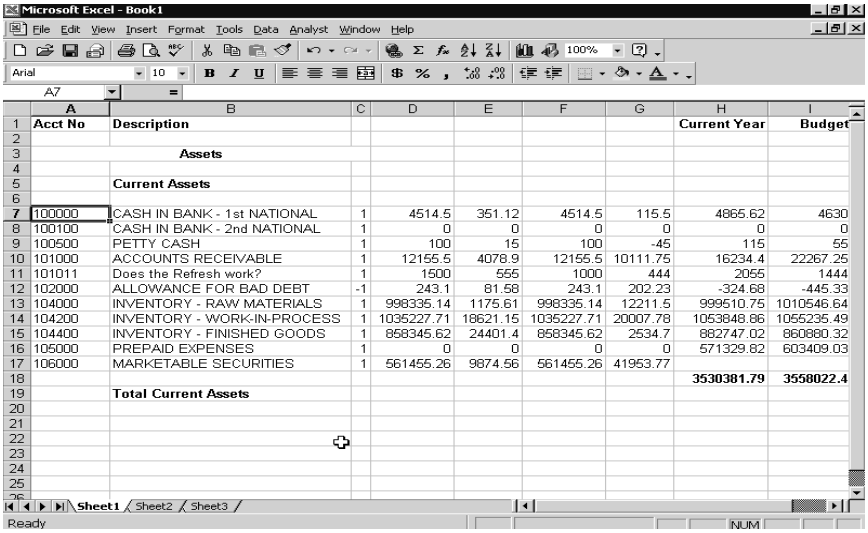
General Ledger Balance Sheet



Go back to Excel and click on one of the OSAS imported fields.

Select Data from the menu and choose Refresh Data

General Ledger Balance Sheet



	A	B	C	D	E	F	G	H	I
1	Acct No	Description						Current Year	Budget
2									
3		Assets							
4									
5		Current Assets							
6									
7	100000	CASH IN BANK - 1st NATIONAL	1	4514.5	351.12	4514.5	115.5	4865.62	4630
8	100100	CASH IN BANK - 2nd NATIONAL	1	0	0	0	0	0	0
9	100500	PETTY CASH	1	100	15	100	-45	115	55
10	101000	ACCOUNTS RECEIVABLE	1	12155.5	4078.9	12155.5	10111.75	16234.4	22267.25
11	101011	Does the Refresh work?	1	1500	555	1000	444	2055	1444
12	102000	ALLOWANCE FOR BAD DEBT	-1	243.1	81.58	243.1	202.23	-324.68	-445.33
13	104000	INVENTORY - RAW MATERIALS	1	998335.14	1175.61	998335.14	12211.5	999510.75	1010546.64
14	104200	INVENTORY - WORK-IN-PROCESS	1	1035227.71	18621.15	1035227.71	20007.78	1053848.86	1055235.49
15	104400	INVENTORY - FINISHED GOODS	1	858345.62	24401.4	858345.62	2534.7	882747.02	860880.32
16	105000	PREPAID EXPENSES	1	0	0	0	0	571329.82	603409.03
17	106000	MARKETABLE SECURITIES	1	561455.26	9874.56	561455.26	41953.77		
18								3530381.79	3558022.4
19		Total Current Assets							
20									
21									
22									
23									
24									
25									

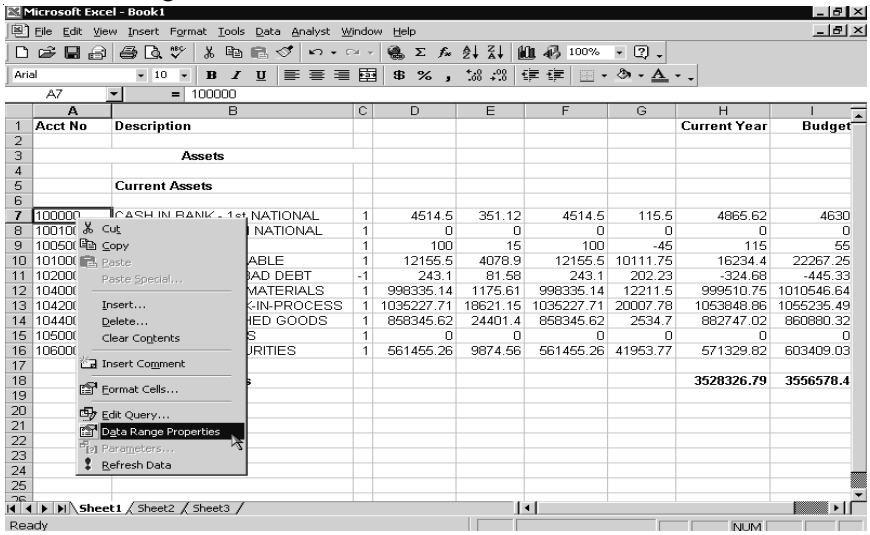
The spreadsheet is refreshed and the data is added, but the last account line does not have the calculated period 1 balances. The Current Year and Budget totals did not move down with the added data and do not reflect the correct amount.

The totals fields are not part of our original query so the refresh data option cannot affect those fields.

We need to modify the query properties to update the totals correctly.

Click Undo to remove the account added through the refresh data function.

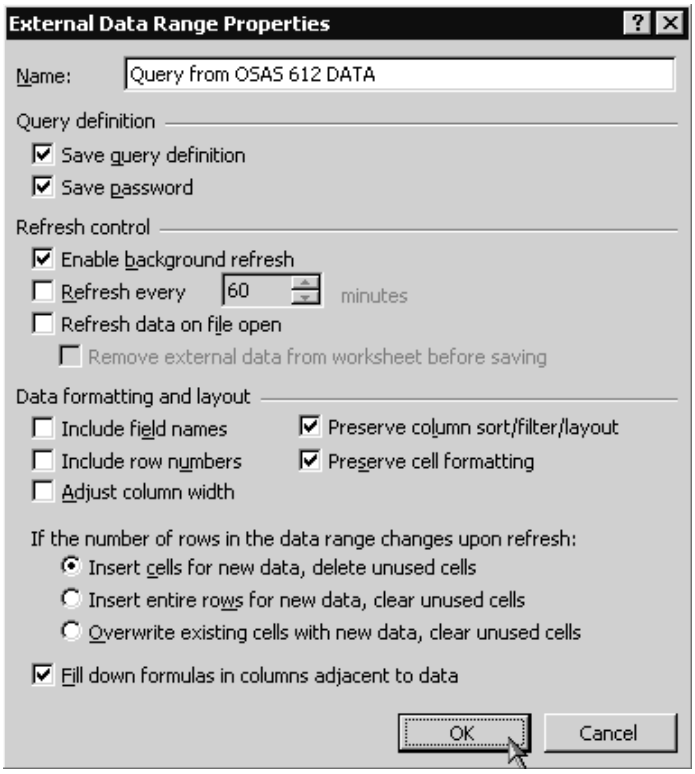
General Ledger Balance Sheet



	A	B	C	D	E	F	G	H	I
1	Acct No	Description						Current Year	Budget
2									
3		Assets							
4									
5		Current Assets							
6									
7	100000	CASH IN BANK - 1st NATIONAL	1	4514.5	351.12	4514.5	115.5	4865.62	4630
8	10010(	NATIONAL	1	0	0	0	0	0	0
9	10050(		1	100	15	100	-45	115	55
10	10100(	ABLE	1	12155.5	4078.9	12155.5	10111.75	16234.4	22267.25
11	10200(	AD DEBT	-1	243.1	81.58	243.1	202.23	-324.68	-445.33
12	10400(	MATERIALS	1	998335.14	1175.61	998335.14	12211.5	999510.75	1010546.64
13	10420(	K-IN-PROCESS	1	1035227.71	18621.15	1035227.71	20007.78	1053848.86	1055235.49
14	10440(	ED GOODS	1	858345.62	24401.4	858345.62	2534.7	882747.02	860880.32
15	10500(	S	1	0	0	0	0	0	0
16	10600(	URITIES	1	561455.26	9874.56	561455.26	41953.77	571329.82	603409.03
17									
18		s						3528326.79	3556578.4
19									
20									
21									
22									
23									
24									
25									

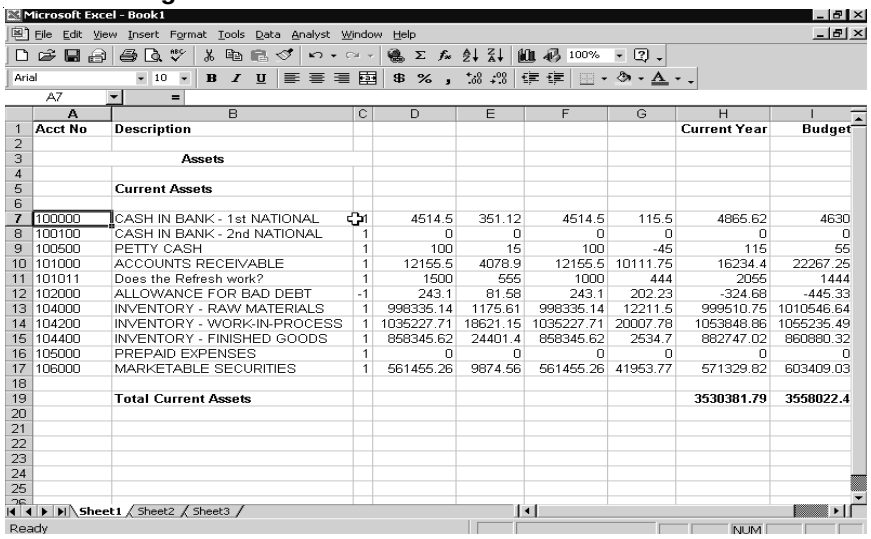
To update the query properties, select an OSAS imported field, right mouse click and choose Data Range Properties or select the Data menu followed by Get External Data and then choose Data Range Properties.

External Data Range Properties Box



To have Excel and Query update the calculated totals correctly, check the Fill down formulas in columns adjacent to data. Also uncheck the Adjust column width field and click OK.

General Ledger Balance Sheet



	A	B	C	D	E	F	G	H	I
1	Acct No	Description						Current Year	Budget
2									
3		Assets							
4									
5		Current Assets							
6									
7	100000	CASH IN BANK - 1st NATIONAL	1	4514.5	351.12	4514.5	115.5	4865.62	4630
8	100100	CASH IN BANK - 2nd NATIONAL	1	0	0	0	0	0	0
9	100500	PETTY CASH	1	100	15	100	-45	115	55
10	101000	ACCOUNTS RECEIVABLE	1	12155.5	4078.9	12155.5	10111.75	16234.4	22267.25
11	101011	Does the Refresh work?	1	1500	555	1000	444	2055	1444
12	102000	ALLOWANCE FOR BAD DEBT	-1	243.1	81.58	243.1	202.23	-324.68	-445.33
13	104000	INVENTORY - RAW MATERIALS	1	998335.14	1175.61	998335.14	12211.5	999510.75	1010546.64
14	104200	INVENTORY - WORK-IN-PROCESS	1	1035227.71	18621.15	1035227.71	20007.78	1053848.86	1055235.49
15	104400	INVENTORY - FINISHED GOODS	1	858345.62	24401.4	858345.62	2534.7	882747.02	860880.32
16	105000	PREPAID EXPENSES	1	0	0	0	0	0	0
17	106000	MARKETABLE SECURITIES	1	561455.26	9874.56	561455.26	41953.77	571329.82	603409.03
18									
19		Total Current Assets						3530381.79	3558022.4

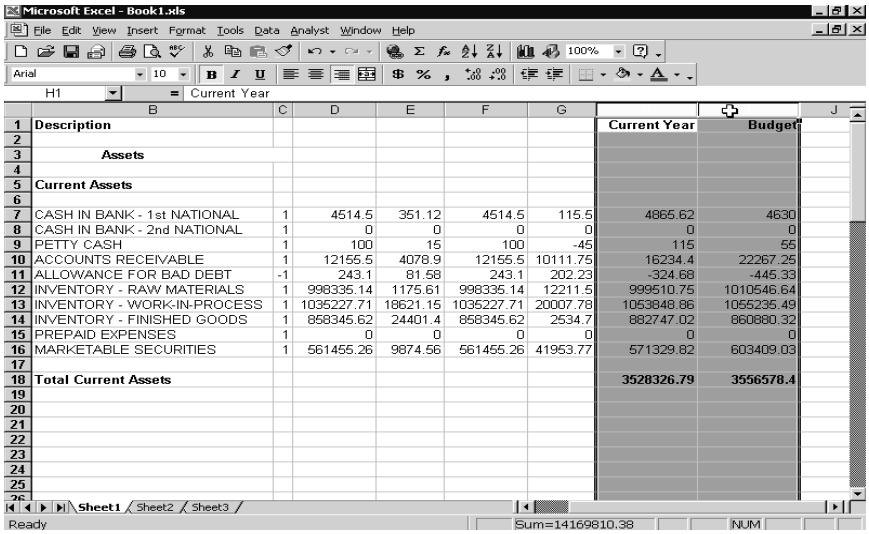
Refresh the data.

All rows should now have the correct calculated total and **Totals Current Assets** should now update and shift correctly.

Undo the refresh data to get the spreadsheet back to the original accounts.

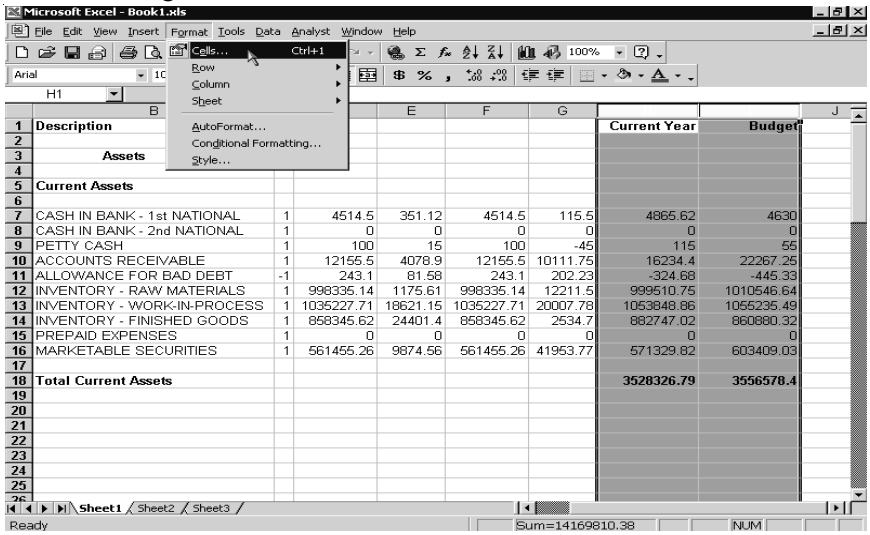
Next, change the format of columns H and I.

General Ledger Balance Sheet



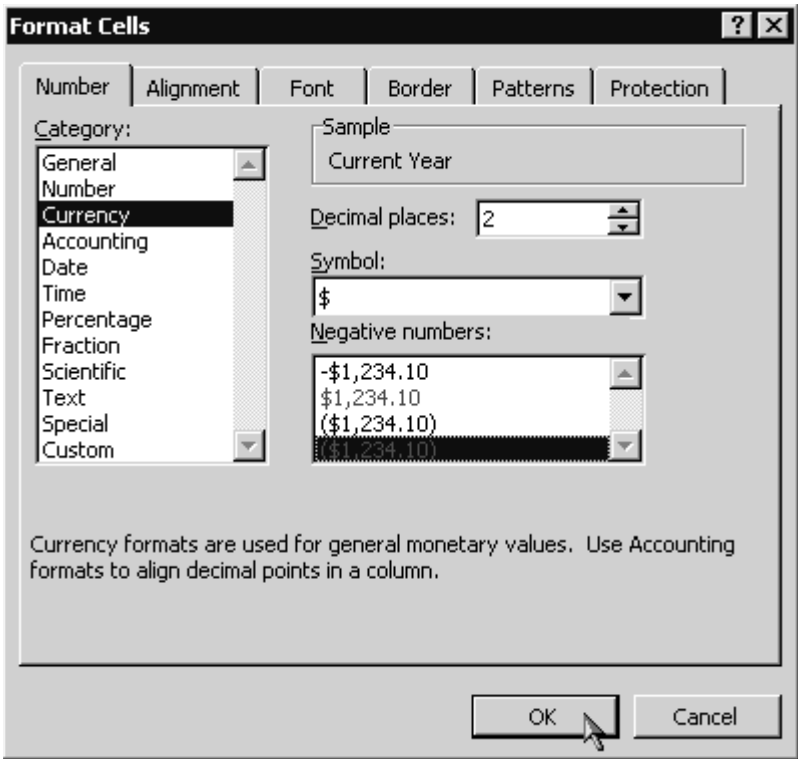
Highlight columns H and I

General Ledger Balance Sheet



Right mouse click and select Format Cells or select Format from the menu and choose Cells.

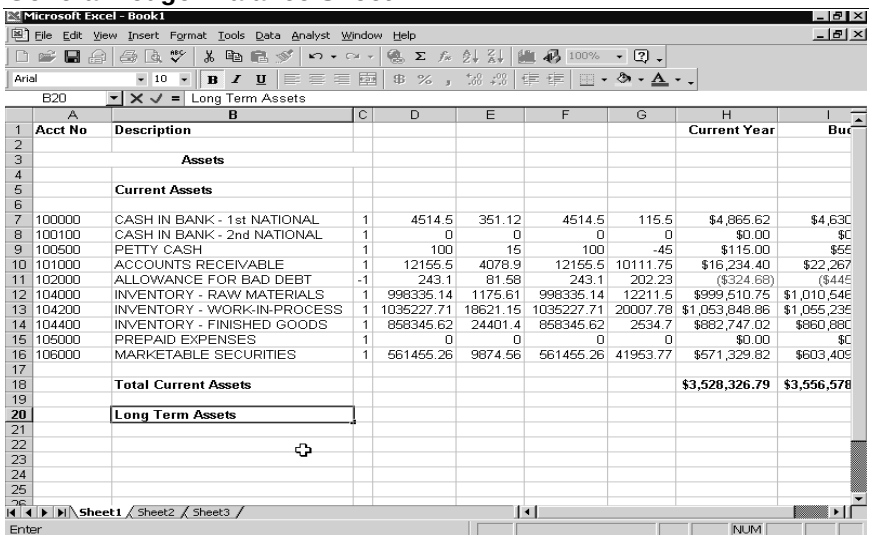
Format Cells



The Format Cells box is displayed. Click the Number tab and choose Currency. Accept the default number of decimal places and select how you want negative numbers to display. Click OK to save.

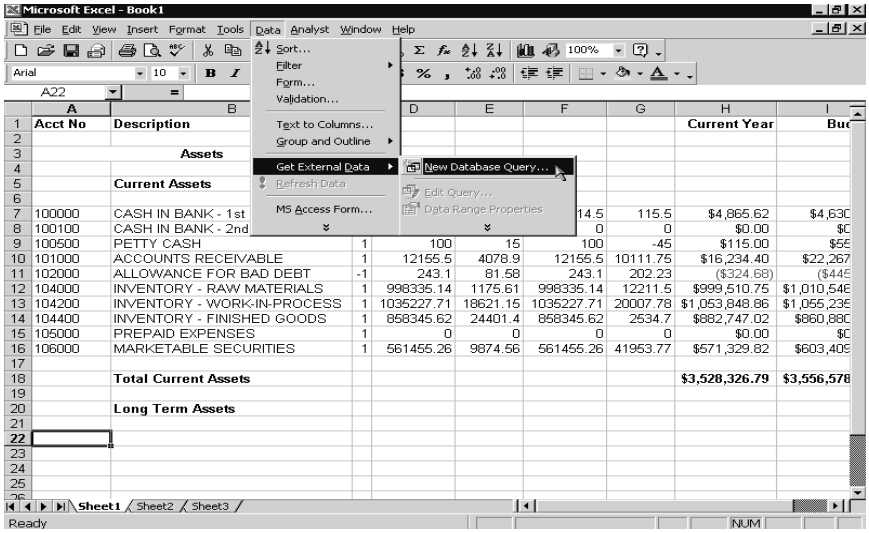
Next, add the accounts for the Long Term Assets section to the sheet.

General Ledger Balance Sheet



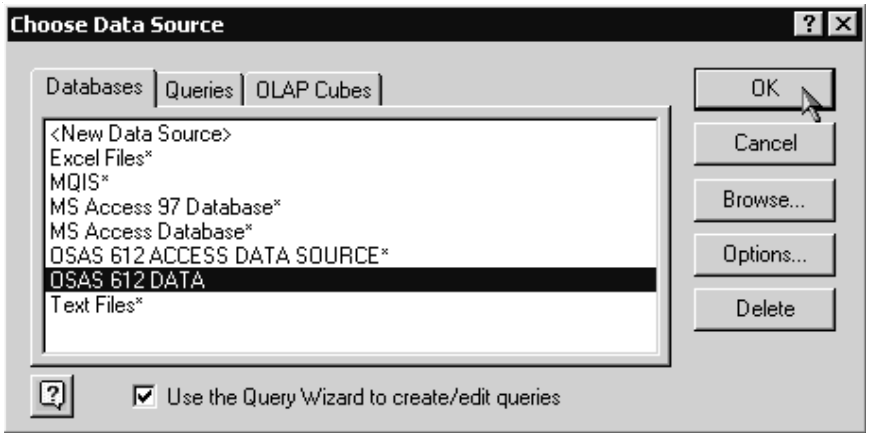
Two rows below the Total Current Assets add a heading of Long Term Assets in column B (cell B20 in this example). Format the cell.

General Ledger Balance Sheet



Two rows below the Long Term Assets heading, click in Column A (Cell A22 in this example). Then select Data from the menu followed by Get External Data and New Database Query.

Choose Data Source



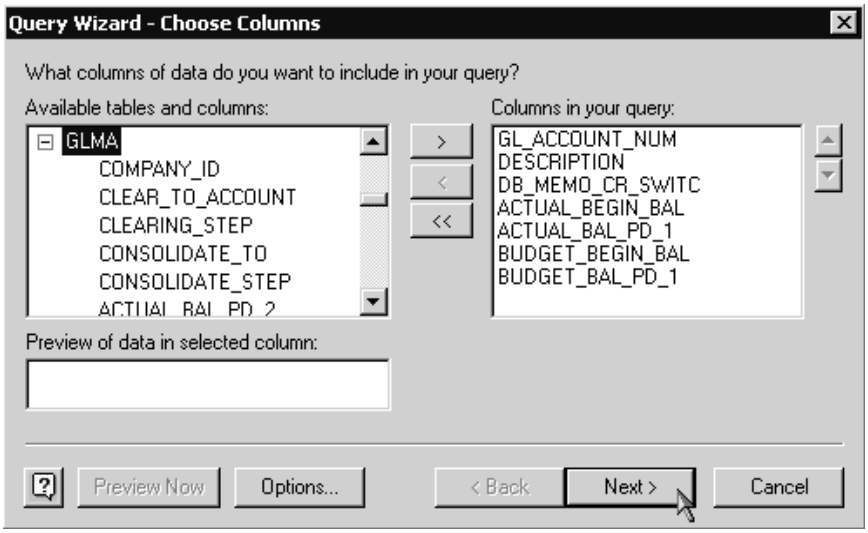
The Choose Data Source box is displayed.

Select the same data source used in the first query.

Select the OSAS 612 DATA source created earlier

Check the box for Use the Query Wizard to create/edit queries.

Query Wizard – Choose Columns



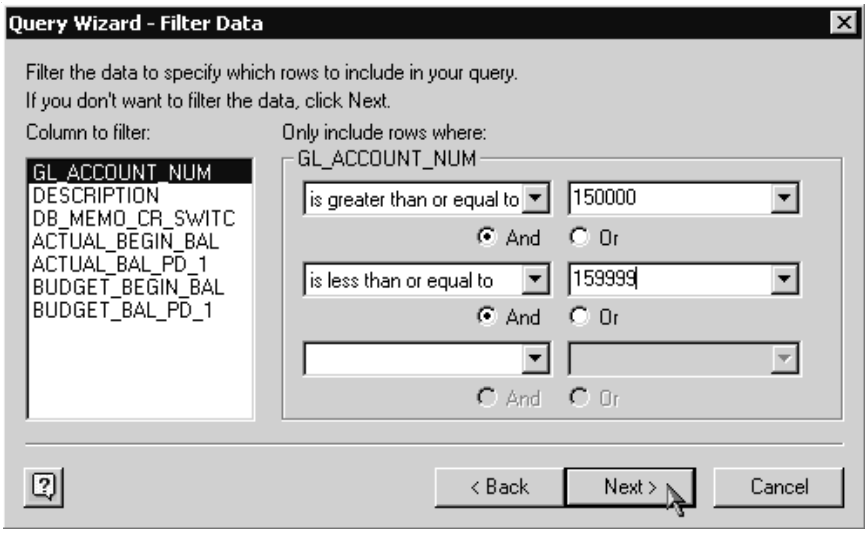
The Query Wizard – Choose Columns box is displayed.

Select the same fields used in the first query.

For this spreadsheet, select the **GLMA** table in the Available tables and columns field. Choose the **GL_ACCOUNT_NUM**, **DESCRIPTION**, **DB_MEMO_CR_SWITC**, **ACTUAL_BEGIN_BAL**, **ACTUAL_BAL_PD_1**, **BUDGET_BEGIN_BAL**, and **BUDGET_BAL_PD_1** columns.

Click the Next button.

Query Wizard – Filter Data

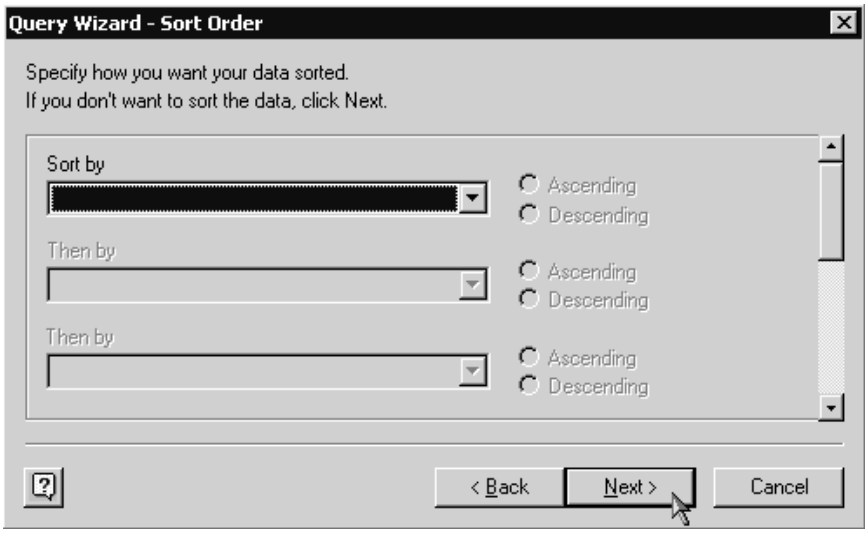


The Query Wizard – Filter Data box is displayed.

Select the GL Account field again, but this time for the is greater than or equal to account enter 150000 and for the is less than or equal to enter 159999

Click the Next button

Query Wizard – Sort Order

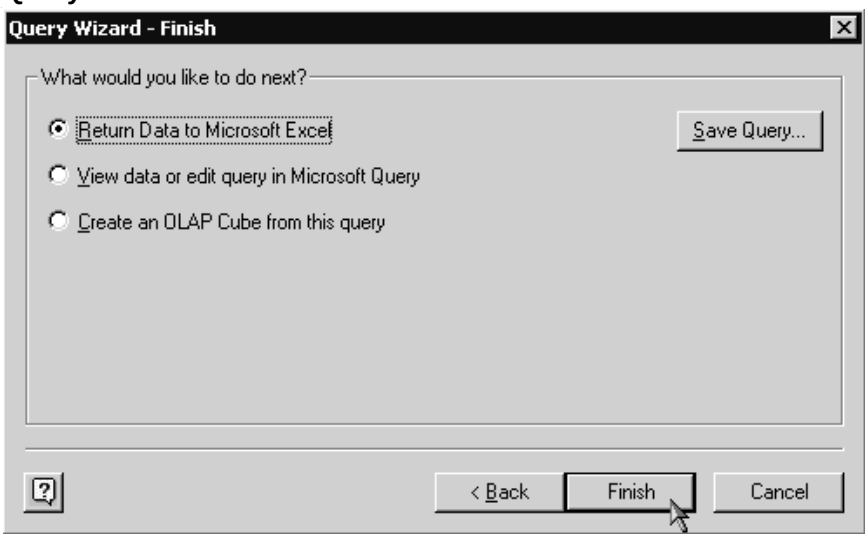


The Query Wizard – Sort Order box is displayed.

Do not sort this spreadsheet.

Click the Next button.

Query Wizard – Finish

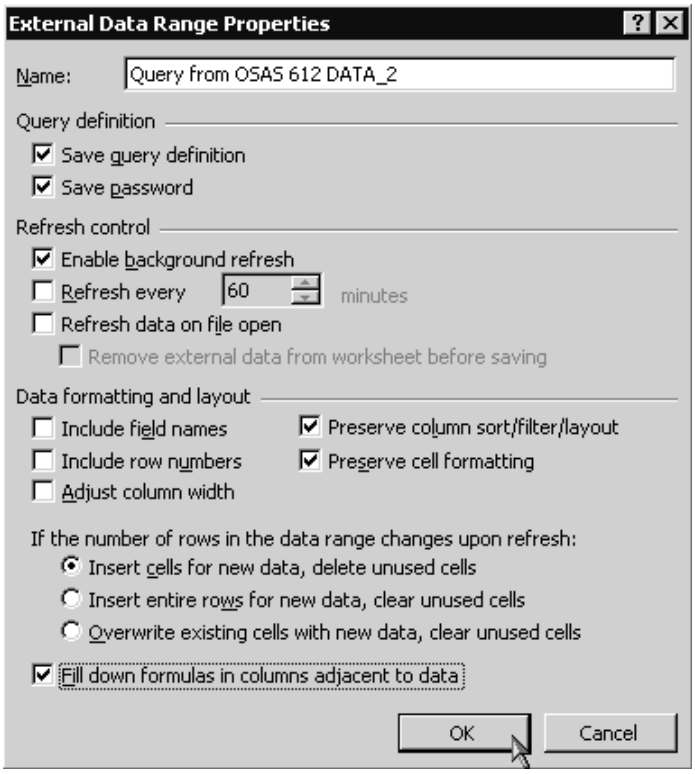


The Query Wizard – Finish box is displayed.

Select where you want to put the data.

Select Return Data to Microsoft Excel and click the Finish button.

External Data Range Properties



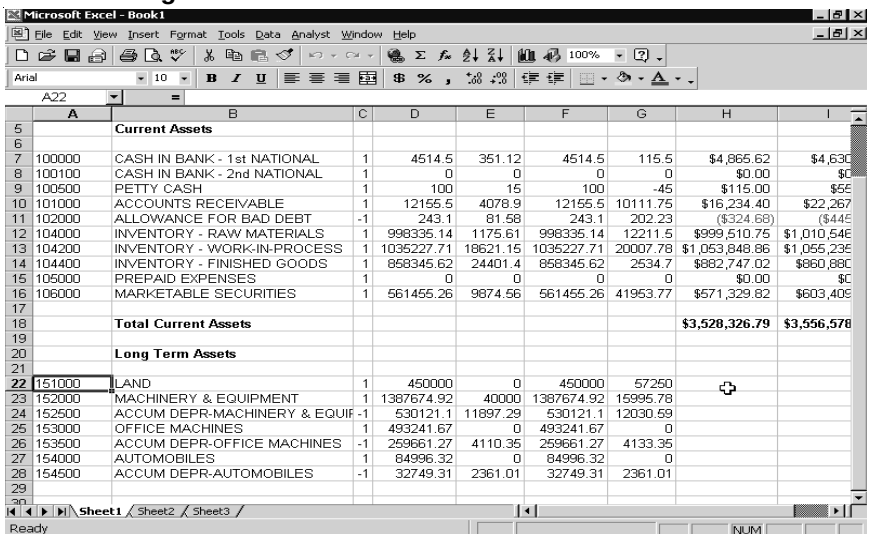
The Returning External Data to Microsoft Excel box is displayed.

Select where to place the data in Excel.

Click the Properties button. Uncheck the Include field names and Adjust column with fields, and check the Fill down formulas in columns adjacent to data.

Click OK and place the data in the select cell in Excel.

General Ledger Balance Sheet



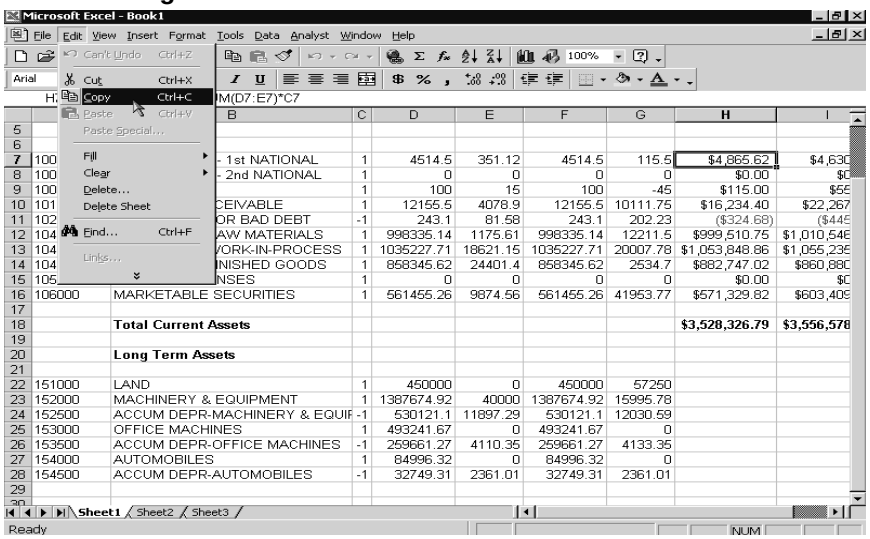
	A	B	C	D	E	F	G	H	I
5		**Current Assets**							
6									
7	100000	CASH IN BANK - 1st NATIONAL	1	4514.5	351.12	4514.5	115.5	$4,865.62	$4,630
8	100100	CASH IN BANK - 2nd NATIONAL	1	0	0	0	0	$0.00	$0
9	100500	PETTY CASH	1	100	15	100	-45	$115.00	$55
10	101000	ACCOUNTS RECEIVABLE	1	12155.5	4078.9	12155.5	10111.75	$16,234.40	$22,267
11	102000	ALLOWANCE FOR BAD DEBT	-1	243.1	81.58	243.1	202.23	($324.68)	($445
12	104000	INVENTORY - RAW MATERIALS	1	998335.14	1175.61	998335.14	12211.5	$999,510.75	$1,010,546
13	104200	INVENTORY - WORK-IN-PROCESS	1	1035227.71	18621.15	1035227.71	20007.78	$1,053,848.86	$1,055,235
14	104400	INVENTORY - FINISHED GOODS	1	858345.62	24401.4	858345.62	2534.7	$882,747.02	$860,880
15	105000	PREPAID EXPENSES	1	0	0	0	0	$0.00	$0
16	106000	MARKETABLE SECURITIES	1	561455.26	9874.56	561455.26	41953.77	$571,329.82	$603,409
17									
18		**Total Current Assets**						**$3,528,326.79**	**$3,556,578**
19									
20		**Long Term Assets**							
21									
22	151000	LAND	1	450000	0	450000	57250		
23	152000	MACHINERY & EQUIPMENT	1	1387674.92	40000	1387674.92	15995.78		
24	152500	ACCUM DEPR-MACHINERY & EQUIF	-1	530121.1	11897.29	530121.1	12030.59		
25	153000	OFFICE MACHINES	1	493241.67	0	493241.67	0		
26	153500	ACCUM DEPR-OFFICE MACHINES	-1	259661.27	4110.35	259661.27	4133.35		
27	154000	AUTOMOBILES	1	84996.32	0	84996.32	0		
28	154500	ACCUM DEPR-AUTOMOBILES	-1	32749.31	2361.01	32749.31	2361.01		
29									

The Long Term Asset accounts are displayed on the spreadsheet.

Next create the Actual and Budget Period 1 totals

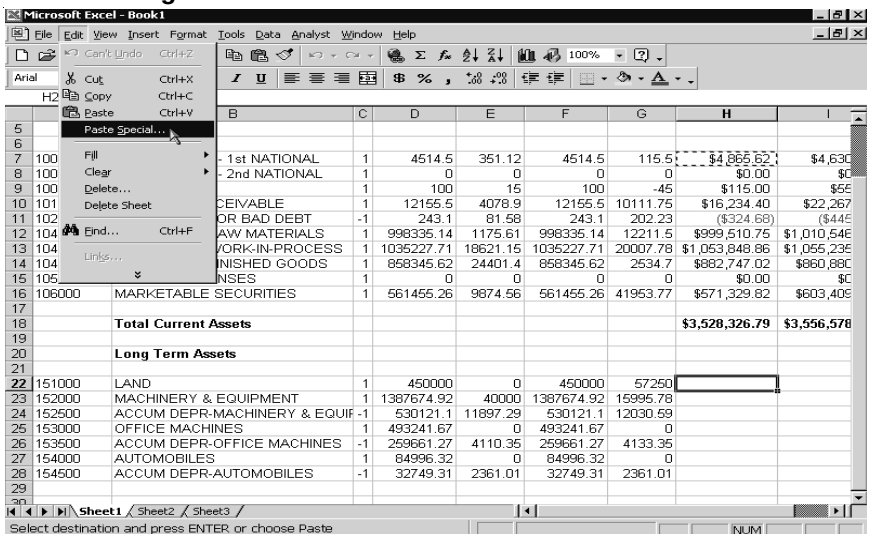
You can enter the formula for columns H and I the same as the Current Assets or you can copy the formula from the Current Assets area to save some time and steps.

General Ledger Balance Sheet



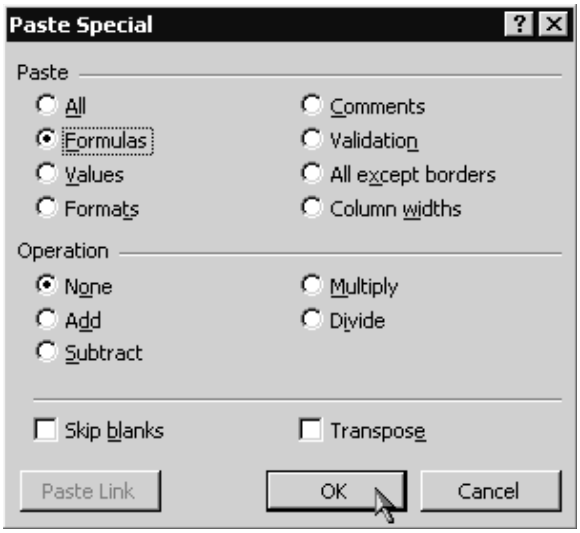
Click any of the Current Year total fields in the Current Assets area. Right click and select Copy or select the Edit menu and choose Copy.

General Ledger Balance Sheet



Click in the first row in column H for the Long Term Assets section. Right click and select Paste Special or select the Edit menu and choose Paste Special.

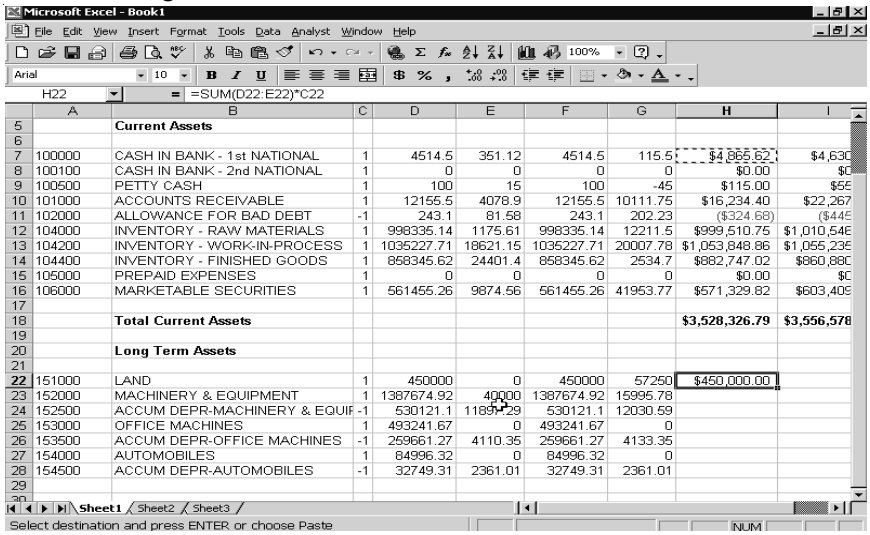
Paste Special



The Paste Special box is displayed.

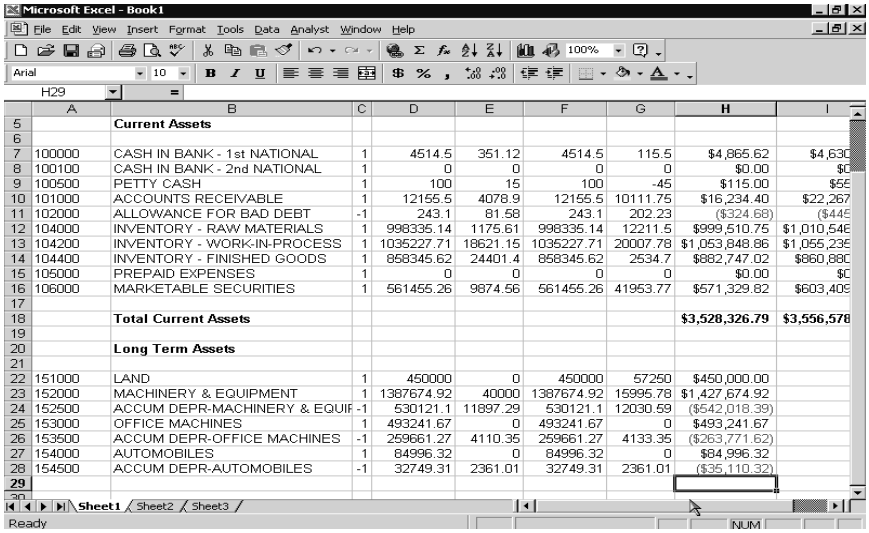
Under Paste select Formulas and click OK.

General Ledger Balance Sheet



The calculated total is displayed

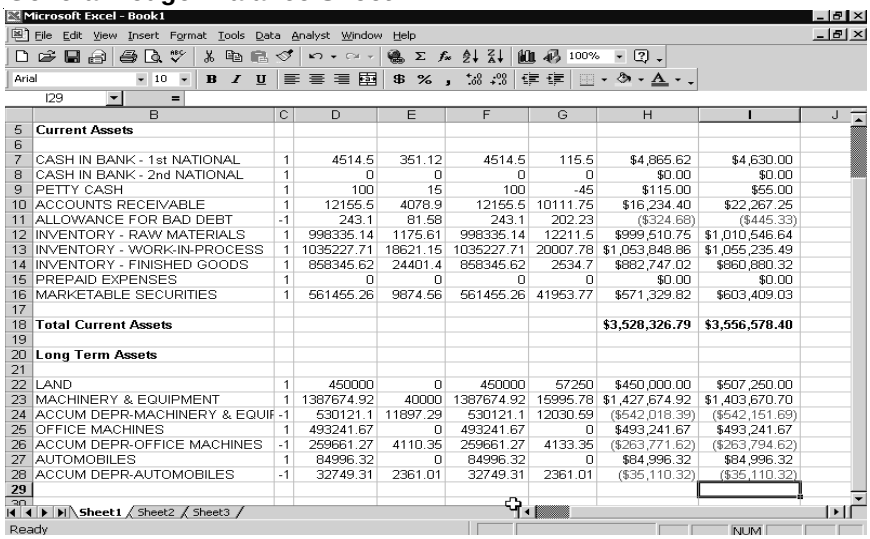
General Ledger Balance Sheet



	A	B	C	D	E	F	G	H	I
5		**Current Assets**							
6									
7	100000	CASH IN BANK - 1st NATIONAL	1	4514.5	351.12	4514.5	115.5	$4,865.62	$4,630
8	100100	CASH IN BANK - 2nd NATIONAL	1	0	0	0	0	$0.00	$0
9	100500	PETTY CASH	1	100	15	100	-45	$115.00	$55
10	101000	ACCOUNTS RECEIVABLE	1	12155.5	4078.9	12155.5	10111.75	$16,234.40	$22,267
11	102000	ALLOWANCE FOR BAD DEBT	-1	243.1	81.58	243.1	202.23	($324.68)	($445
12	104000	INVENTORY - RAW MATERIALS	1	998335.14	1175.61	998335.14	12211.5	$999,510.75	$1,010,546
13	104200	INVENTORY - WORK-IN-PROCESS	1	1035227.71	18621.15	1035227.71	20007.78	$1,053,848.86	$1,055,235
14	104400	INVENTORY - FINISHED GOODS	1	858345.62	24401.4	858345.62	2534.7	$882,747.02	$860,880
15	105000	PREPAID EXPENSES	1	0	0	0	0	$0.00	$0
16	106000	MARKETABLE SECURITIES	1	561455.26	9874.56	561455.26	41953.77	$571,329.82	$603,409
17									
18		**Total Current Assets**						**$3,528,326.79**	**$3,556,578**
19									
20		**Long Term Assets**							
21									
22	151000	LAND	1	450000	0	450000	57250	$450,000.00	
23	152000	MACHINERY & EQUIPMENT	1	1387674.92	40000	1387674.92	15995.78	$1,427,674.92	
24	152500	ACCUM DEPR-MACHINERY & EQUIF	-1	530121.1	11897.29	530121.1	12030.59	($542,018.39)	
25	153000	OFFICE MACHINES	1	493241.67	0	493241.67	0	$493,241.67	
26	153500	ACCUM DEPR-OFFICE MACHINES	-1	259661.27	4110.35	259661.27	4133.35	($263,771.62)	
27	154000	AUTOMOBILES	1	84996.32	0	84996.32	0	$84,996.32	
28	154500	ACCUM DEPR-AUTOMOBILES	-1	32749.31	2361.01	32749.31	2361.01	($35,110.32)	
29									

Fill the remaining cells for column H in the Long Term Assets section.

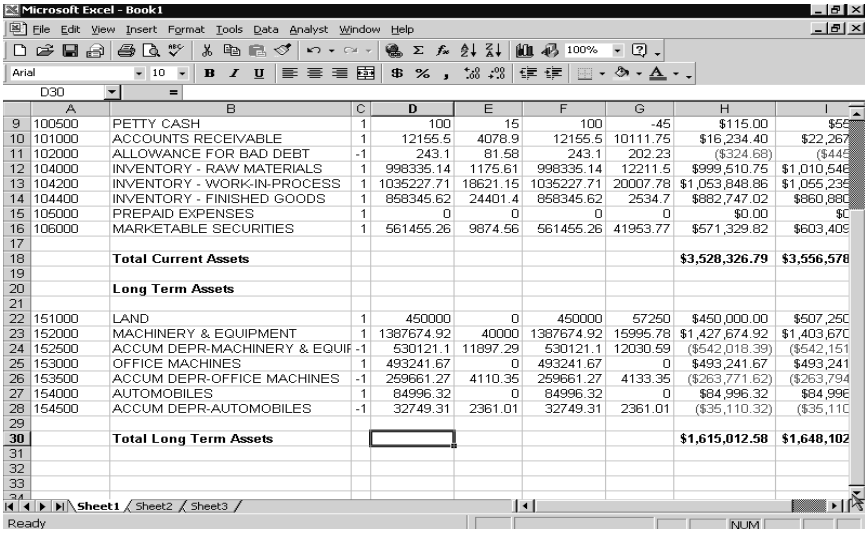
General Ledger Balance Sheet



	B	C	D	E	F	G	H	I	J
5	**Current Assets**								
6									
7	CASH IN BANK - 1st NATIONAL	1	4514.5	351.12	4514.5	115.5	$4,865.62	$4,630.00	
8	CASH IN BANK - 2nd NATIONAL	1	0	0	0	0	$0.00	$0.00	
9	PETTY CASH	1	100	15	100	-45	$115.00	$55.00	
10	ACCOUNTS RECEIVABLE	1	12155.5	4078.9	12155.5	10111.75	$16,234.40	$22,267.25	
11	ALLOWANCE FOR BAD DEBT	-1	243.1	81.58	243.1	202.23	($324.68)	($445.33)	
12	INVENTORY - RAW MATERIALS	1	998335.14	1175.61	998335.14	12211.5	$999,510.75	$1,010,546.64	
13	INVENTORY - WORK-IN-PROCESS	1	1035227.71	18621.15	1035227.71	20007.78	$1,053,848.86	$1,055,235.49	
14	INVENTORY - FINISHED GOODS	1	858345.62	24401.4	858345.62	2534.7	$882,747.02	$860,880.32	
15	PREPAID EXPENSES	1	0	0	0	0	$0.00	$0.00	
16	MARKETABLE SECURITIES	1	561455.26	9874.56	561455.26	41953.77	$571,329.82	$603,409.03	
17									
18	**Total Current Assets**						**$3,528,326.79**	**$3,556,578.40**	
19									
20	**Long Term Assets**								
21									
22	LAND	1	450000	0	450000	57250	$450,000.00	$507,250.00	
23	MACHINERY & EQUIPMENT	1	1387674.92	40000	1387674.92	15995.78	$1,427,674.92	$1,403,670.70	
24	ACCUM DEPR-MACHINERY & EQUIF	-1	530121.1	11897.29	530121.1	12030.59	($542,018.39)	($542,151.69)	
25	OFFICE MACHINES	1	493241.67	0	493241.67	0	$493,241.67	$493,241.67	
26	ACCUM DEPR-OFFICE MACHINES	-1	259661.27	4110.35	259661.27	4133.35	($263,771.62)	($263,794.62)	
27	AUTOMOBILES	1	84996.32	0	84996.32	0	$84,996.32	$84,996.32	
28	ACCUM DEPR-AUTOMOBILES	-1	32749.31	2361.01	32749.31	2361.01	($35,110.32)	($35,110.32)	
29									

Repeat the process for Column I.

General Ledger Balance Sheet



	A	B	C	D	E	F	G	H	I
9	100500	PETTY CASH	1	100	15	100	-45	$115.00	$55
10	101000	ACCOUNTS RECEIVABLE	1	12155.5	4078.9	12155.5	10111.75	$16,234.40	$22,267
11	102000	ALLOWANCE FOR BAD DEBT	-1	243.1	81.58	243.1	202.23	($324.68)	($445
12	104000	INVENTORY - RAW MATERIALS	1	998335.14	1175.61	998335.14	12211.5	$999,510.75	$1,010,546
13	104200	INVENTORY - WORK-IN-PROCESS	1	1035227.71	18621.15	1035227.71	20007.78	$1,053,848.86	$1,055,235
14	104400	INVENTORY - FINISHED GOODS	1	858345.62	24401.4	858345.62	2534.7	$882,747.02	$860,880
15	105000	PREPAID EXPENSES	1	0	0	0	0	$0.00	$0
16	106000	MARKETABLE SECURITIES	1	561455.26	9874.56	561455.26	41953.77	$571,329.82	$603,409
17									
18		**Total Current Assets**						**$3,528,326.79**	**$3,556,578**
19									
20		**Long Term Assets**							
21									
22	151000	LAND	1	450000	0	450000	57250	$450,000.00	$507,250
23	152000	MACHINERY & EQUIPMENT	1	1387674.92	40000	1387674.92	15995.78	$1,427,674.92	$1,403,670
24	152500	ACCUM DEPR-MACHINERY & EQUIF	-1	530121.1	11897.29	530121.1	12030.59	($542,018.39)	($542,151
25	153000	OFFICE MACHINES	1	493241.67	0	493241.67	0	$493,241.67	$493,241
26	153500	ACCUM DEPR-OFFICE MACHINES	-1	259661.27	4110.35	259661.27	4133.35	($263,771.62)	($263,794
27	154000	AUTOMOBILES	1	84996.32	0	84996.32	0	$84,996.32	$84,996
28	154500	ACCUM DEPR-AUTOMOBILES	-1	32749.31	2361.01	32749.31	2361.01	($35,110.32)	($35,110
29									
30		**Total Long Term Assets**						**$1,615,012.58**	**$1,648,102**
31									
32									
33									

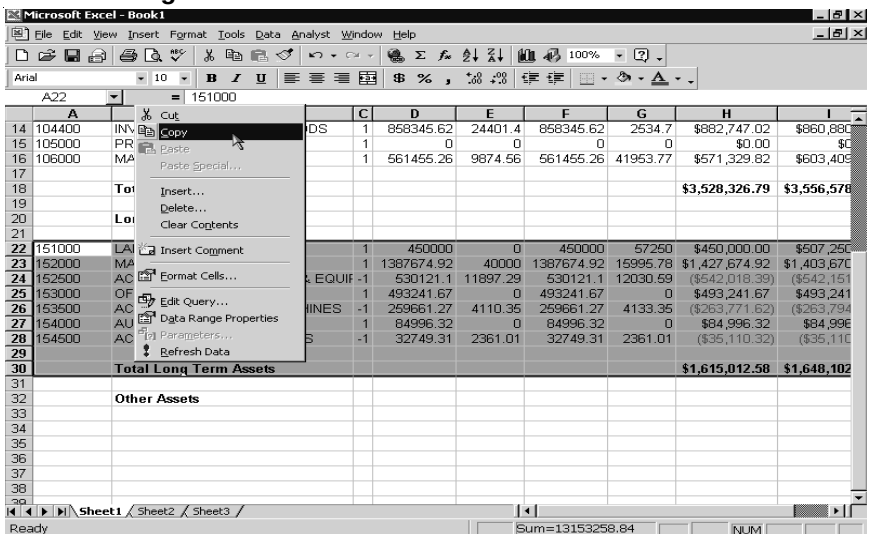
In column B create a Total Long Term Assets label and use the AutoSum function in Columns H and I to create the Long Term Assets subtotals.

Next, add the accounts for Other Assets.

Two rows below Total Long Term Assets enter a head of Other Assets in column B (cell B32 in this example) and format the cell any way you want.

To get the Other Asset accounts and totals, you can select the cell to start in, choose Get External Data and go through the Query Wizard as with the other queries or use the Copy/Paste functions and edit the query to get the same results.

General Ledger Balance Sheet

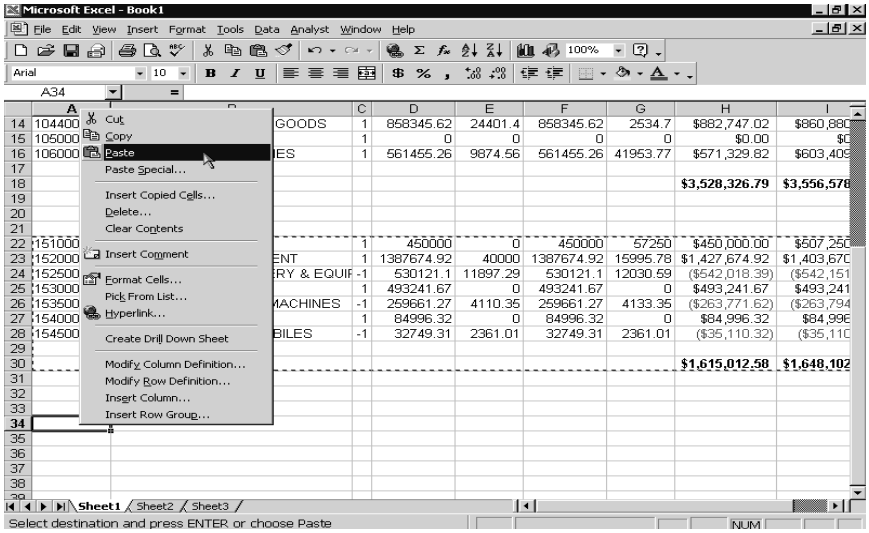


	A	B	C	D	E	F	G	H	I
14	104400	INV...DS	1	858345.62	24401.4	858345.62	2534.7	$882,747.02	$860,880
15	105000	PR	1	0	0	0	0	$0.00	$0
16	106000	MA	1	561455.26	9874.56	561455.26	41953.77	$571,329.82	$603,409
17									
18		To						**$3,528,326.79**	**$3,556,578**
19									
20		Lo							
21									
22	151000	LA	1	450000	0	450000	57250	$450,000.00	$507,250
23	152000	MA	1	1387674.92	40000	1387674.92	15995.78	$1,427,674.92	$1,403,670
24	152500	AC ...EQUIF	-1	530121.1	11897.29	530121.1	12030.59	($542,018.39)	($542,151
25	153000	OF	1	493241.67	0	493241.67	0	$493,241.67	$493,241
26	153500	AC ...INES	-1	259661.27	4110.35	259661.27	4133.35	($263,771.62)	($263,794
27	154000	AU	1	84996.32	0	84996.32	0	$84,996.32	$84,996
28	154500	AC ...S	-1	32749.31	2361.01	32749.31	2361.01	($35,110.32)	($35,110
29									
30		**Total Long Term Assets**						**$1,615,012.58**	**$1,648,102**
31									
32		**Other Assets**							
33									
34									
35									
36									
37									
38									

Click the first account in column A in the Long Term Assets section, hold the shift down and select the total for Budget Long Term Assets in column I.

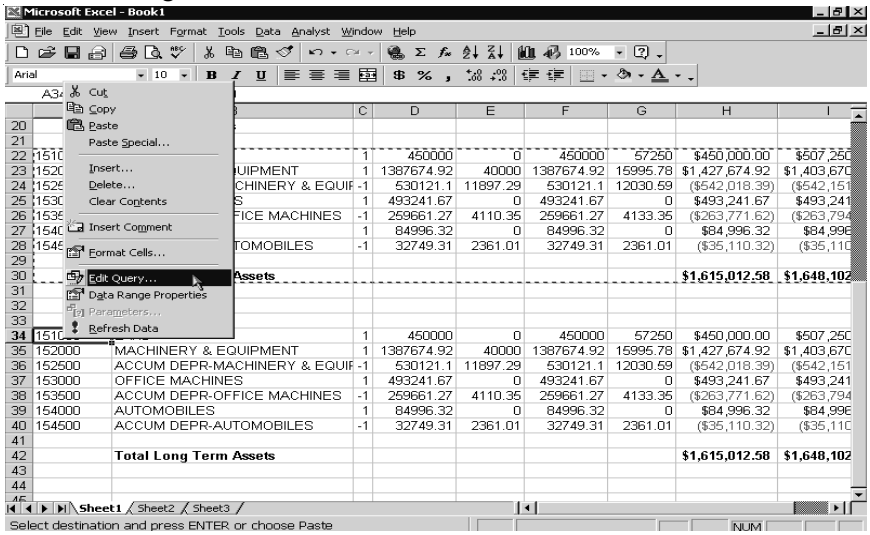
Right click and select Copy or select Copy from the Edit menu.

General Ledger Balance Sheet



Select the cell where you want to start the Other Assets section, right click and select Paste or select Paste from the Edit menu.

General Ledger Balance Sheet



The data from the Long Term Assets section is copied into the Other Assets section. We must edit the query to get the information for the Other Asset accounts. Click in any OSAS field.

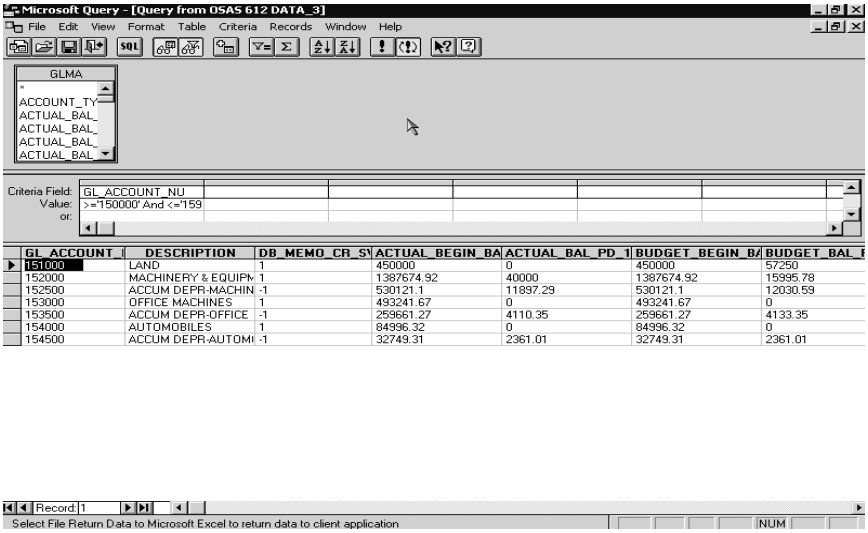
Right mouse click and select Edit Query or Select Data from the menu then choose Get External Data, followed by Edit Query.

Query Wizard Warning

With the 2.3x and 3.0x versions of the BASIS ODBC Driver and Excel 2000 or higher, you will get a prompt saying “This query cannot be edited by the Query Wizard.”[17]

Click the OK button.

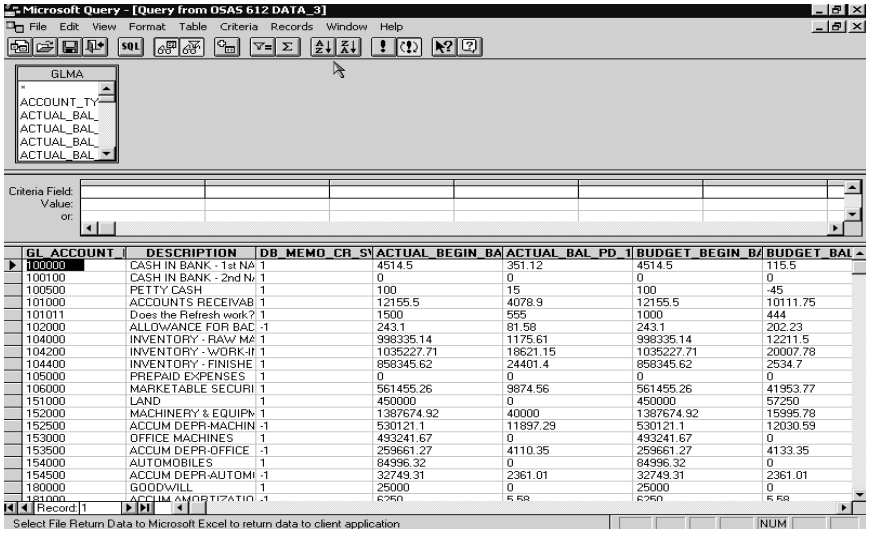
Microsoft Query



This brings you into Microsoft Query, where you can edit the query and return the data to Excel.

17.With Excel 97 you are taken through the Query Wizard

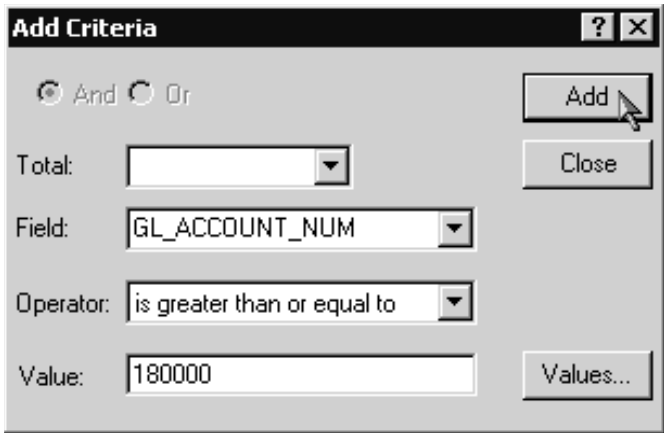
Microsoft Query



Select Remove All Criteria from the Criteria menu.

This will bring all of the records into the query.

Add Criteria



Select Criteria from the menu and choose Add Criteria.

Leave Total blank

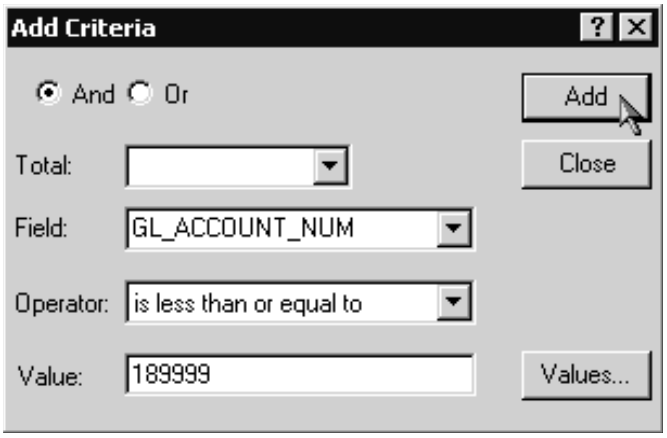
In Field select the GL_ACCOUNT_NUM column.

For Operator select “is greater than or equal to”.

For Value enter 180000 or click the Values button and select the value from a list.

Click the Add button.

Add Criteria



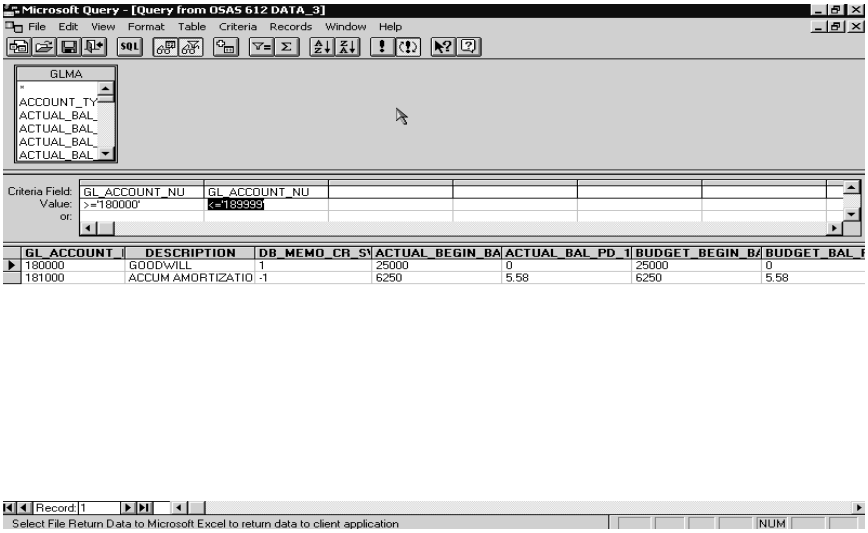
After entering the first criteria field, select “is less than or equal to” in the Operator field.

In Value enter 189999 or click the Values button to select from a list.

Click the Add button.

Click the Close button to exit Add Criteria.[18]

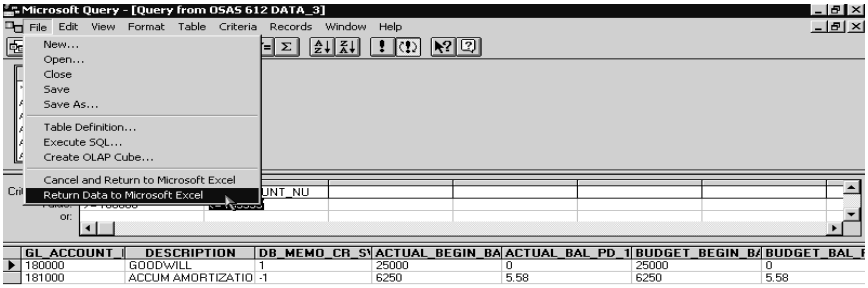
Microsoft Query

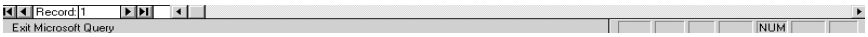


The query is updated with the new criteria.

18.With the Query Wizard in Excel 97, go to the Filter Data screen and change the account number for the first line to 180000 and change the second line to 189999.

Microsoft Query

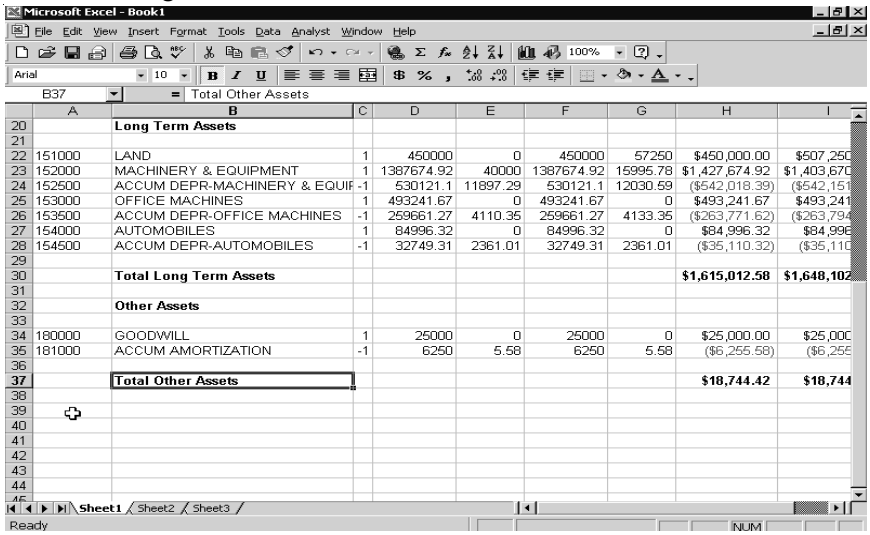




Select Return Data to Microsoft Excel from the File menu.[19]

You can save the query before returning the data to Excel if you would like.

General Ledger Balance Sheet

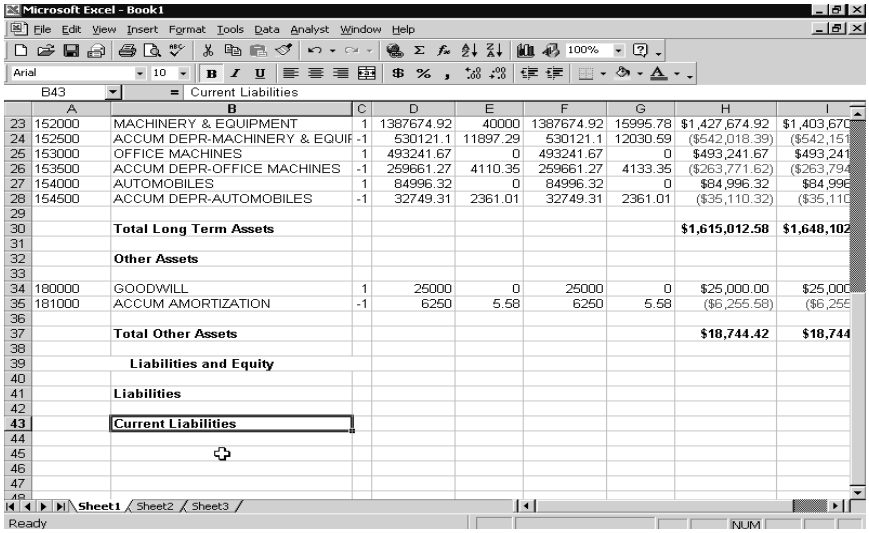


The spreadsheet is updated to show accounts 180000-189999.

Change the Total Long Term Assets label to Total Other Assets.

19.With the Query Wizard in Excel 97, click the Next button to move to the Sort screen. Click the Next button on the Sort screen to move to the Finish screen. On the Finish screen select Return Data to Microsoft Excel. When the Returning External Data box is displayed, check the Properties to make sure they have not changed (See Page 110).

General Ledger Balance Sheet



	A	B	C	D	E	F	G	H	I
23	152000	MACHINERY & EQUIPMENT	1	1387674.92	40000	1387674.92	15995.78	$1,427,674.92	$1,403,67
24	152500	ACCUM DEPR-MACHINERY & EQUIP	-1	530121.1	11897.29	530121.1	12030.59	($542,018.39)	($542,15
25	153000	OFFICE MACHINES	1	493241.67	0	493241.67	0	$493,241.67	$493,241
26	153500	ACCUM DEPR-OFFICE MACHINES	-1	259661.27	4110.35	259661.27	4133.35	($263,771.62)	($263,79
27	154000	AUTOMOBILES	1	84996.32	0	84996.32	0	$84,996.32	$84,99
28	154500	ACCUM DEPR-AUTOMOBILES	-1	32749.31	2361.01	32749.31	2361.01	($35,110.32)	($35,11
29									
30		**Total Long Term Assets**						**$1,615,012.58**	**$1,648,10**
31									
32		**Other Assets**							
33									
34	180000	GOODWILL	1	25000	0	25000	0	$25,000.00	$25,00
35	181000	ACCUM AMORTIZATION	-1	6250	5.58	6250	5.58	($6,255.58)	($6,25
36									
37		**Total Other Assets**						**$18,744.42**	**$18,74**
38									
39		**Liabilities and Equity**							
40									
41		**Liabilities**							
42									
43		**Current Liabilities**							
44									
45									
46									
47									

The next section of the spreadsheet will be the Liabilities and Equity.

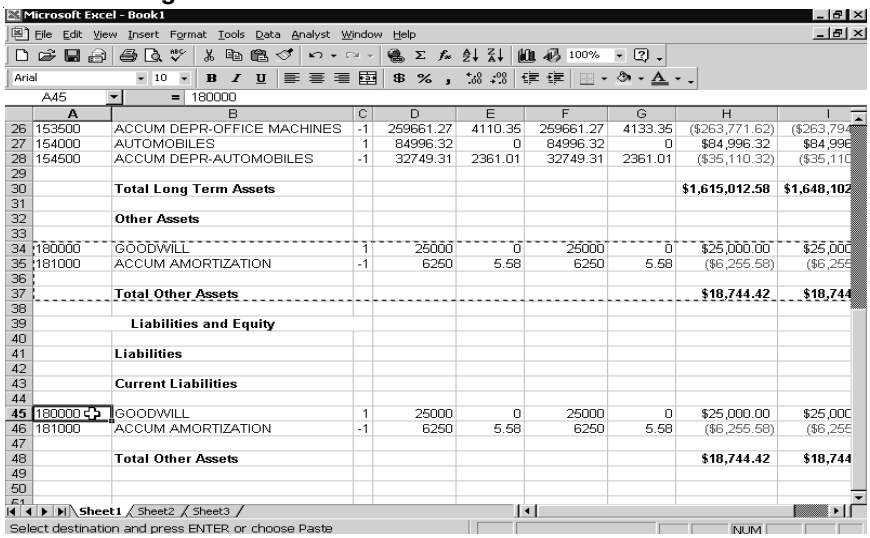
Two rows below the Total Other Assets enter Liabilities and Equity in column A (cell A39 in this example).

Select the Liabilities and Equity cell, cells B and C. Merge and center Liabilities and Equity in all 3 cells. Make Bold or format any way you want.

Two rows below Liabilities and Equity in column B (cell B41 in this example) enter Liabilities and format any way you want.

Two rows below Liabilities in column B (cell B43 in this example) enter Current Liabilities and format any way you want.

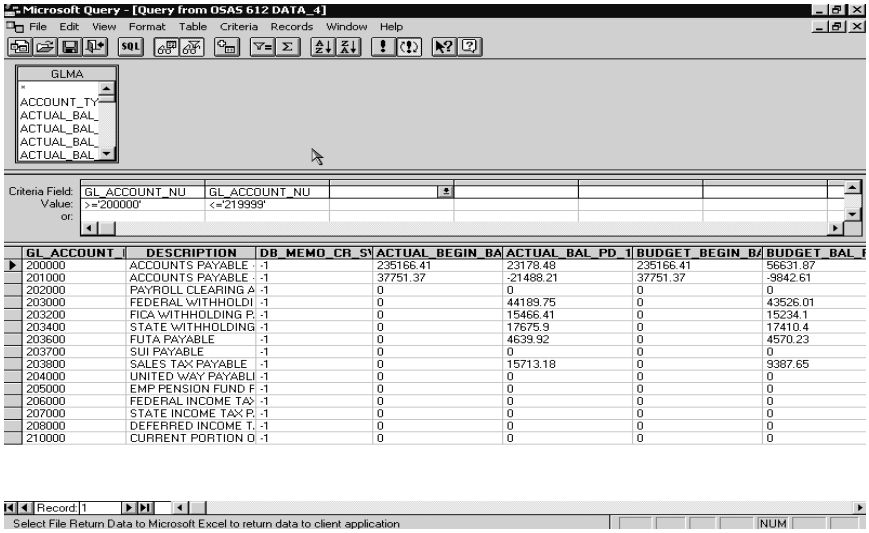
General Ledger Balance Sheet



	A	B	C	D	E	F	G	H	I
26	153500	ACCUM DEPR-OFFICE MACHINES	-1	259661.27	4110.35	259661.27	4133.35	($263,771.62)	($263,79
27	154000	AUTOMOBILES	1	84996.32	0	84996.32	0	$84,996.32	$84,99
28	154500	ACCUM DEPR-AUTOMOBILES	-1	32749.31	2361.01	32749.31	2361.01	($35,110.32)	($35,11
29									
30		**Total Long Term Assets**						**$1,615,012.58**	**$1,648,10**
31									
32		**Other Assets**							
33									
34	180000	GOODWILL	1	25000	0	25000	0	$25,000.00	$25,00
35	181000	ACCUM AMORTIZATION	-1	6250	5.58	6250	5.58	($6,255.58)	($6,25
36									
37		**Total Other Assets**						**$18,744.42**	**$18,74**
38									
39		**Liabilities and Equity**							
40									
41		**Liabilities**							
42									
43		**Current Liabilities**							
44									
45	180000	GOODWILL	1	25000	0	25000	0	$25,000.00	$25,00
46	181000	ACCUM AMORTIZATION	-1	6250	5.58	6250	5.58	($6,255.58)	($6,25
47									
48		**Total Other Assets**						**$18,744.42**	**$18,74**
49									
50									

Copy the Other Assets account section, including the totals and Paste the cells in the Current Liabilities section.

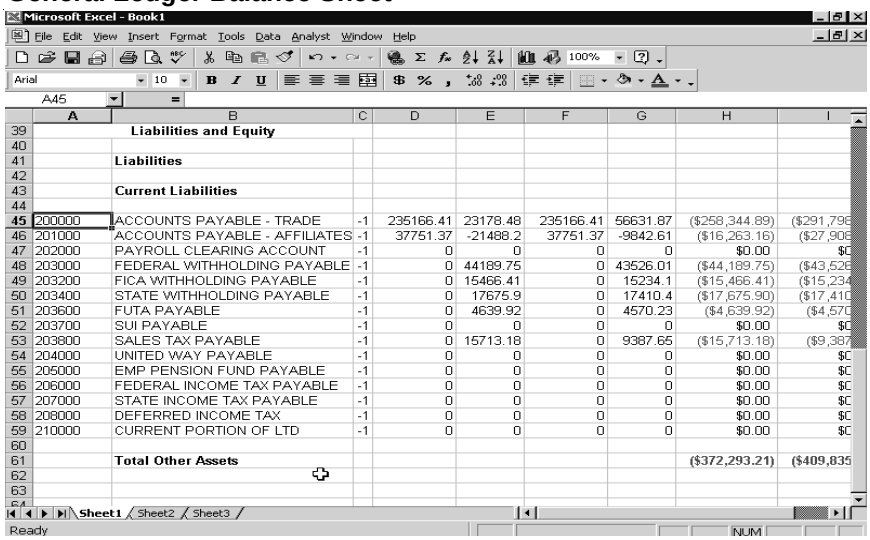
Microsoft Query



Edit the query using Microsoft Query or the Query Wizard. Add the criteria for accounts 200000-219999.

Return the data to Excel

General Ledger Balance Sheet

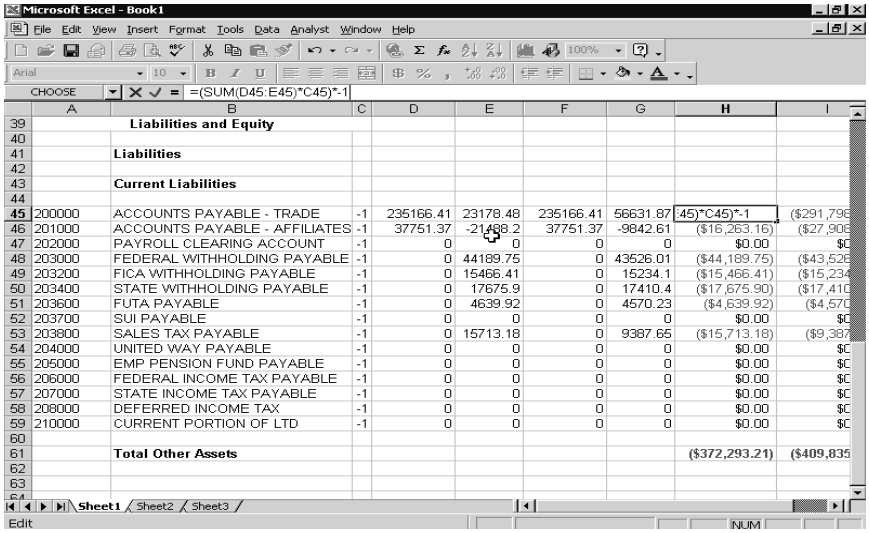


The spreadsheet is updated with the Current Liabilities accounts.

The Actual and Budget totals are displayed with the wrong sign.

Liability accounts are normally credit accounts and carry a credit balance. In OSAS we store credit balances in credit accounts as a positive number. The formula used for the ending balance totals worked for Asset accounts because we wanted debit balances in debit accounts to print as positive numbers and credit balances in credit accounts to print as negatives. For Liability accounts we want the opposite to be true. In the OSAS statements function this was accomplished by using the Reverse Sign to Print function. We must modify the formula in Excel to do the same thing.

General Ledger Balance Sheet



	A	B	C	D	E	F	G	H	I
39		**Liabilities and Equity**							
40									
41		**Liabilities**							
42									
43		**Current Liabilities**							
44									
45	200000	ACCOUNTS PAYABLE - TRADE	-1	235166.41	23178.48	235166.41	56631.87	45)*C45)*-1	($291,79
46	201000	ACCOUNTS PAYABLE - AFFILIATES	-1	37751.37	-21488.2	37751.37	-9842.61	($16,263.16)	($27,90
47	202000	PAYROLL CLEARING ACCOUNT	-1	0	0	0	0	$0.00	$0
48	203000	FEDERAL WITHHOLDING PAYABLE	-1	0	44189.75	0	43526.01	($44,189.75)	($43,52
49	203200	FICA WITHHOLDING PAYABLE	-1	0	15466.41	0	15234.1	($15,466.41)	($15,23
50	203400	STATE WITHHOLDING PAYABLE	-1	0	17675.9	0	17410.4	($17,675.90)	($17,41
51	203600	FUTA PAYABLE	-1	0	4639.92	0	4570.23	($4,639.92)	($4,57
52	203700	SUI PAYABLE	-1	0	0	0	0	$0.00	$0
53	203800	SALES TAX PAYABLE	-1	0	15713.18	0	9387.65	($15,713.18)	($9,38
54	204000	UNITED WAY PAYABLE	-1	0	0	0	0	$0.00	$0
55	205000	EMP PENSION FUND PAYABLE	-1	0	0	0	0	$0.00	$0
56	206000	FEDERAL INCOME TAX PAYABLE	-1	0	0	0	0	$0.00	$0
57	207000	STATE INCOME TAX PAYABLE	-1	0	0	0	0	$0.00	$0
58	208000	DEFERRED INCOME TAX	-1	0	0	0	0	$0.00	$0
59	210000	CURRENT PORTION OF LTD	-1	0	0	0	0	$0.00	$0
60									
61		**Total Other Assets**						**($372,293.21)**	**($409,83**
62									
63									

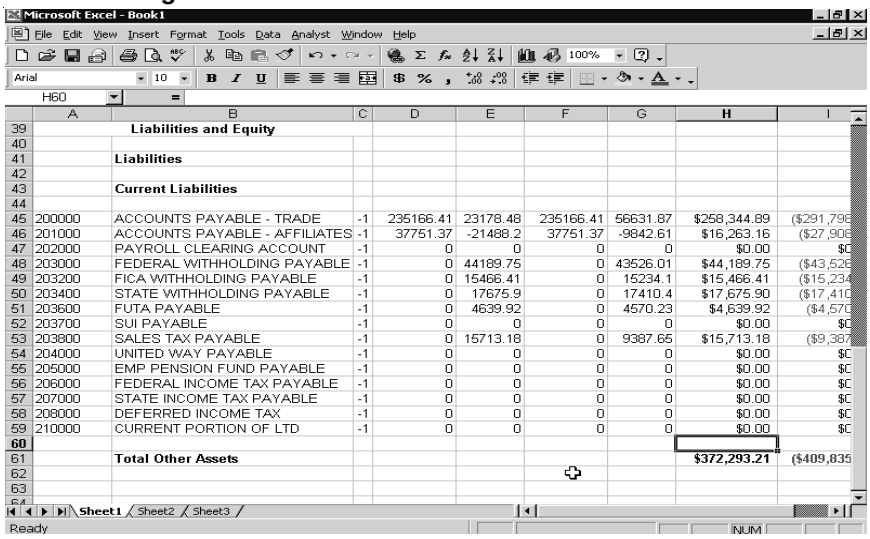
In the Asset account section we used the formula ***=SUM(Dn:En)*Cn*** for the Actual amounts and ***=SUM(Fn:Gn)*Cn*** for the Budget amounts with n representing the row number.

For the Liability accounts we could use the IF function and enter the formula ***=IF(Cn=1,SUM(Dn:En)*-1,SUM(Dn:En))*** for the Actual amounts and ***=IF(Cn=1,SUM(Fn:Gn)*-1,SUM(Fn:Gn))*** for the Budget amounts.

To remain consistent with the formula for the Asset accounts multiply the total by a -1 to get the same results as the IF formula. The formula for the Actual amounts would be: ***=(SUM(Dn:En)*Cn)*-1***

For the first account under the Current Year column in the Current Liabilities section the formula would be **=(SUM(D45:E45)*C45)*-1**

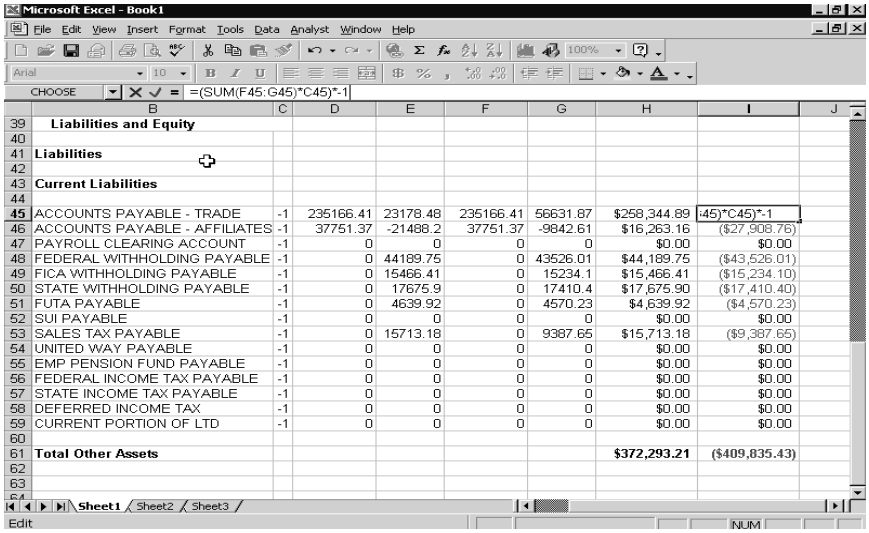
General Ledger Balance Sheet



	A	B	C	D	E	F	G	H	I
39		**Liabilities and Equity**							
40									
41		**Liabilities**							
42									
43		**Current Liabilities**							
44									
45	200000	ACCOUNTS PAYABLE - TRADE	-1	235166.41	23178.48	235166.41	56631.87	$258,344.89	($291,79
46	201000	ACCOUNTS PAYABLE - AFFILIATES	-1	37751.37	-21488.2	37751.37	-9842.61	$16,263.16	($27,90
47	202000	PAYROLL CLEARING ACCOUNT	-1	0	0	0	0	$0.00	$0
48	203000	FEDERAL WITHHOLDING PAYABLE	-1	0	44189.75	0	43526.01	$44,189.75	($43,52
49	203200	FICA WITHHOLDING PAYABLE	-1	0	15466.41	0	15234.1	$15,466.41	($15,23
50	203400	STATE WITHHOLDING PAYABLE	-1	0	17675.9	0	17410.4	$17,675.90	($17,41
51	203600	FUTA PAYABLE	-1	0	4639.92	0	4570.23	$4,639.92	($4,57
52	203700	SUI PAYABLE	-1	0	0	0	0	$0.00	$0
53	203800	SALES TAX PAYABLE	-1	0	15713.18	0	9387.65	$15,713.18	($9,38
54	204000	UNITED WAY PAYABLE	-1	0	0	0	0	$0.00	$0
55	205000	EMP PENSION FUND PAYABLE	-1	0	0	0	0	$0.00	$0
56	206000	FEDERAL INCOME TAX PAYABLE	-1	0	0	0	0	$0.00	$0
57	207000	STATE INCOME TAX PAYABLE	-1	0	0	0	0	$0.00	$0
58	208000	DEFERRED INCOME TAX	-1	0	0	0	0	$0.00	$0
59	210000	CURRENT PORTION OF LTD	-1	0	0	0	0	$0.00	$0
60									
61		**Total Other Assets**						**$372,293.21**	**($409,83**
62									
63									

After getting the correct total in the first row, fill the remaining cells in the Actual column with the correct formula. The total should also change to reflect the correct sign.

General Ledger Balance Sheet

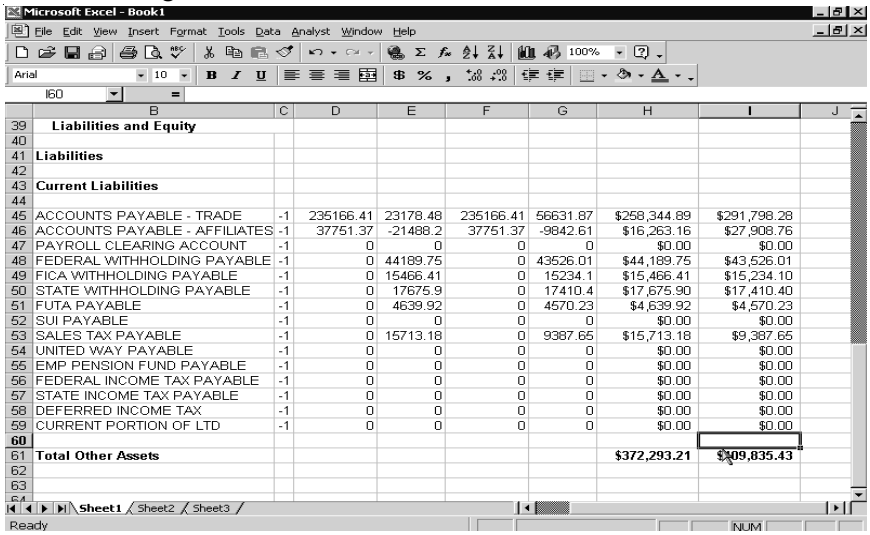


	B	C	D	E	F	G	H	I	J
39	**Liabilities and Equity**								
40									
41	**Liabilities**								
42									
43	**Current Liabilities**								
44									
45	ACCOUNTS PAYABLE - TRADE	-1	235166.41	23178.48	235166.41	56631.87	$258,344.89	-45)*C45)*-1	
46	ACCOUNTS PAYABLE - AFFILIATES	-1	37751.37	-21488.2	37751.37	-9842.61	$16,263.16	($27,908.76)	
47	PAYROLL CLEARING ACCOUNT	-1	0	0	0	0	$0.00	$0.00	
48	FEDERAL WITHHOLDING PAYABLE	-1	0	44189.75	0	43526.01	$44,189.75	($43,526.01)	
49	FICA WITHHOLDING PAYABLE	-1	0	15466.41	0	15234.1	$15,466.41	($15,234.10)	
50	STATE WITHHOLDING PAYABLE	-1	0	17675.9	0	17410.4	$17,675.90	($17,410.40)	
51	FUTA PAYABLE	-1	0	4639.92	0	4570.23	$4,639.92	($4,570.23)	
52	SUI PAYABLE	-1	0	0	0	0	$0.00	$0.00	
53	SALES TAX PAYABLE	-1	0	15713.18	0	9387.65	$15,713.18	($9,387.65)	
54	UNITED WAY PAYABLE	-1	0	0	0	0	$0.00	$0.00	
55	EMP PENSION FUND PAYABLE	-1	0	0	0	0	$0.00	$0.00	
56	FEDERAL INCOME TAX PAYABLE	-1	0	0	0	0	$0.00	$0.00	
57	STATE INCOME TAX PAYABLE	-1	0	0	0	0	$0.00	$0.00	
58	DEFERRED INCOME TAX	-1	0	0	0	0	$0.00	$0.00	
59	CURRENT PORTION OF LTD	-1	0	0	0	0	$0.00	$0.00	
60									
61	**Total Other Assets**						**$372,293.21**	**($409,835.43)**	
62									
63									

The formula for the Budget amounts would be: ***=(SUM(Dn:En)*Cn)*-1***

For the first account under the Budget column in the Current Liabilities section the formula would be **=(SUM(F45:G45)*C45)*-1**

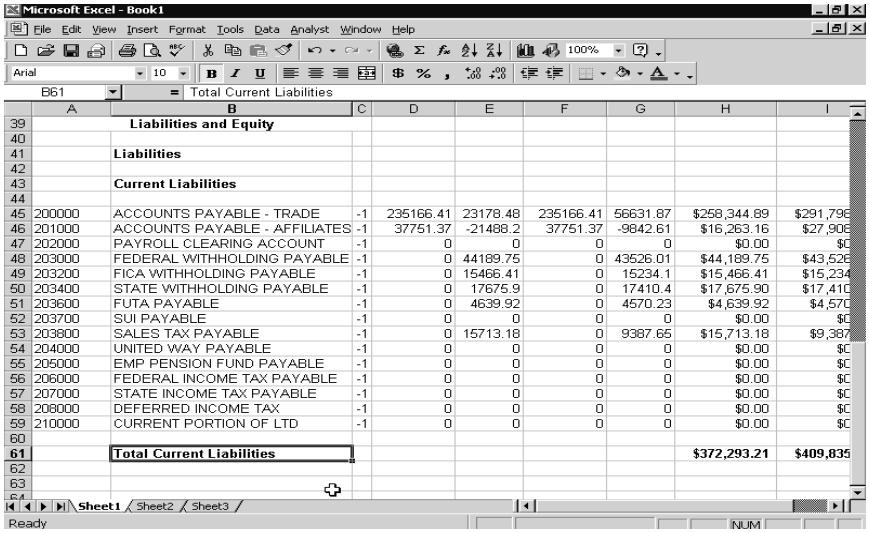
General Ledger Balance Sheet



	B	C	D	E	F	G	H	I	J
39	**Liabilities and Equity**								
40									
41	**Liabilities**								
42									
43	**Current Liabilities**								
44									
45	ACCOUNTS PAYABLE - TRADE	-1	235166.41	23178.48	235166.41	56631.87	$258,344.89	$291,798.28	
46	ACCOUNTS PAYABLE - AFFILIATES	-1	37751.37	-21488.2	37751.37	-9842.61	$16,263.16	$27,908.76	
47	PAYROLL CLEARING ACCOUNT	-1	0	0	0	0	$0.00	$0.00	
48	FEDERAL WITHHOLDING PAYABLE	-1	0	44189.75	0	43526.01	$44,189.75	$43,526.01	
49	FICA WITHHOLDING PAYABLE	-1	0	15466.41	0	15234.1	$15,466.41	$15,234.10	
50	STATE WITHHOLDING PAYABLE	-1	0	17675.9	0	17410.4	$17,675.90	$17,410.40	
51	FUTA PAYABLE	-1	0	4639.92	0	4570.23	$4,639.92	$4,570.23	
52	SUI PAYABLE	-1	0	0	0	0	$0.00	$0.00	
53	SALES TAX PAYABLE	-1	0	15713.18	0	9387.65	$15,713.18	$9,387.65	
54	UNITED WAY PAYABLE	-1	0	0	0	0	$0.00	$0.00	
55	EMP PENSION FUND PAYABLE	-1	0	0	0	0	$0.00	$0.00	
56	FEDERAL INCOME TAX PAYABLE	-1	0	0	0	0	$0.00	$0.00	
57	STATE INCOME TAX PAYABLE	-1	0	0	0	0	$0.00	$0.00	
58	DEFERRED INCOME TAX	-1	0	0	0	0	$0.00	$0.00	
59	CURRENT PORTION OF LTD	-1	0	0	0	0	$0.00	$0.00	
60									
61	**Total Other Assets**						**$372,293.21**	**$409,835.43**	
62									
63									

After getting the correct total in the first row, fill the remaining cells in the Budget column with the correct formula. The total should also change to reflect the correct sign.

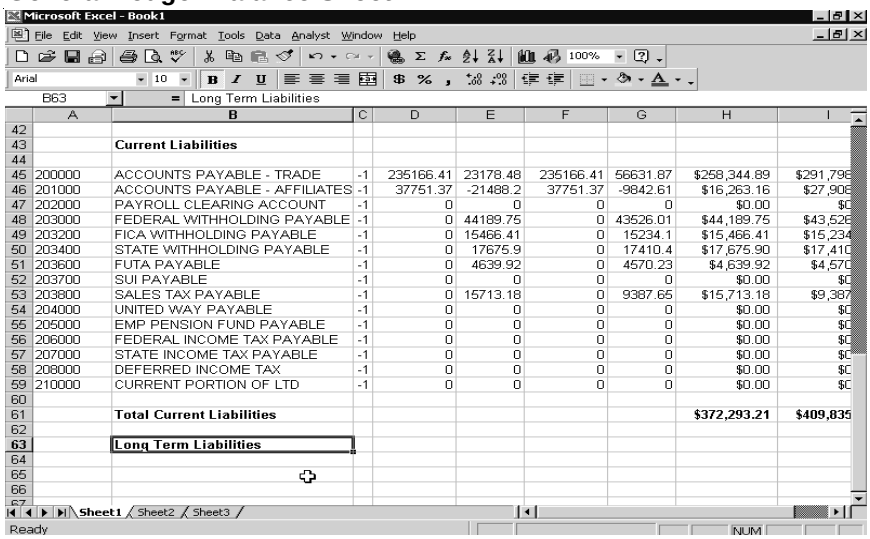
General Ledger Balance Sheet



	A	B	C	D	E	F	G	H	I
39		**Liabilities and Equity**							
40									
41		**Liabilities**							
42									
43		**Current Liabilities**							
44									
45	200000	ACCOUNTS PAYABLE - TRADE	-1	235166.41	23178.48	235166.41	56631.87	$258,344.89	$291,79
46	201000	ACCOUNTS PAYABLE - AFFILIATES	-1	37751.37	-21488.2	37751.37	-9842.61	$16,263.16	$27,90
47	202000	PAYROLL CLEARING ACCOUNT	-1	0	0	0	0	$0.00	$
48	203000	FEDERAL WITHHOLDING PAYABLE	-1	0	44189.75	0	43526.01	$44,189.75	$43,52
49	203200	FICA WITHHOLDING PAYABLE	-1	0	15466.41	0	15234.1	$15,466.41	$15,23
50	203400	STATE WITHHOLDING PAYABLE	-1	0	17675.9	0	17410.4	$17,675.90	$17,41
51	203600	FUTA PAYABLE	-1	0	4639.92	0	4570.23	$4,639.92	$4,57
52	203700	SUI PAYABLE	-1	0	0	0	0	$0.00	$
53	203800	SALES TAX PAYABLE	-1	0	15713.18	0	9387.65	$15,713.18	$9,38
54	204000	UNITED WAY PAYABLE	-1	0	0	0	0	$0.00	$
55	205000	EMP PENSION FUND PAYABLE	-1	0	0	0	0	$0.00	$
56	206000	FEDERAL INCOME TAX PAYABLE	-1	0	0	0	0	$0.00	$
57	207000	STATE INCOME TAX PAYABLE	-1	0	0	0	0	$0.00	$
58	208000	DEFERRED INCOME TAX	-1	0	0	0	0	$0.00	$
59	210000	CURRENT PORTION OF LTD	-1	0	0	0	0	$0.00	$
60									
61		**Total Current Liabilities**						**$372,293.21**	**$409,83**
62									
63									

Change the Total Other Assets label to Total Current Liabilities

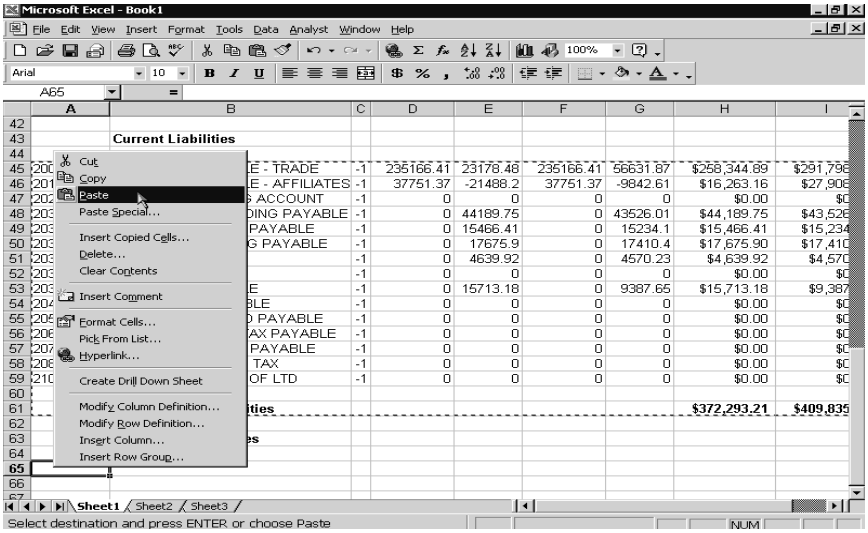
General Ledger Balance Sheet



	A	B	C	D	E	F	G	H	I
42									
43		**Current Liabilities**							
44									
45	200000	ACCOUNTS PAYABLE - TRADE	-1	235166.41	23178.48	235166.41	56631.87	$258,344.89	$291,79
46	201000	ACCOUNTS PAYABLE - AFFILIATES	-1	37751.37	-21488.2	37751.37	-9842.61	$16,263.16	$27,90
47	202000	PAYROLL CLEARING ACCOUNT	-1	0	0	0	0	$0.00	$
48	203000	FEDERAL WITHHOLDING PAYABLE	-1	0	44189.75	0	43526.01	$44,189.75	$43,52
49	203200	FICA WITHHOLDING PAYABLE	-1	0	15466.41	0	15234.1	$15,466.41	$15,23
50	203400	STATE WITHHOLDING PAYABLE	-1	0	17675.9	0	17410.4	$17,675.90	$17,41
51	203600	FUTA PAYABLE	-1	0	4639.92	0	4570.23	$4,639.92	$4,57
52	203700	SUI PAYABLE	-1	0	0	0	0	$0.00	$
53	203800	SALES TAX PAYABLE	-1	0	15713.18	0	9387.65	$15,713.18	$9,38
54	204000	UNITED WAY PAYABLE	-1	0	0	0	0	$0.00	$
55	205000	EMP PENSION FUND PAYABLE	-1	0	0	0	0	$0.00	$
56	206000	FEDERAL INCOME TAX PAYABLE	-1	0	0	0	0	$0.00	$
57	207000	STATE INCOME TAX PAYABLE	-1	0	0	0	0	$0.00	$
58	208000	DEFERRED INCOME TAX	-1	0	0	0	0	$0.00	$
59	210000	CURRENT PORTION OF LTD	-1	0	0	0	0	$0.00	$
60									
61		**Total Current Liabilities**						**$372,293.21**	**$409,83**
62									
63		**Long Term Liabilities**							
64									
65									
66									

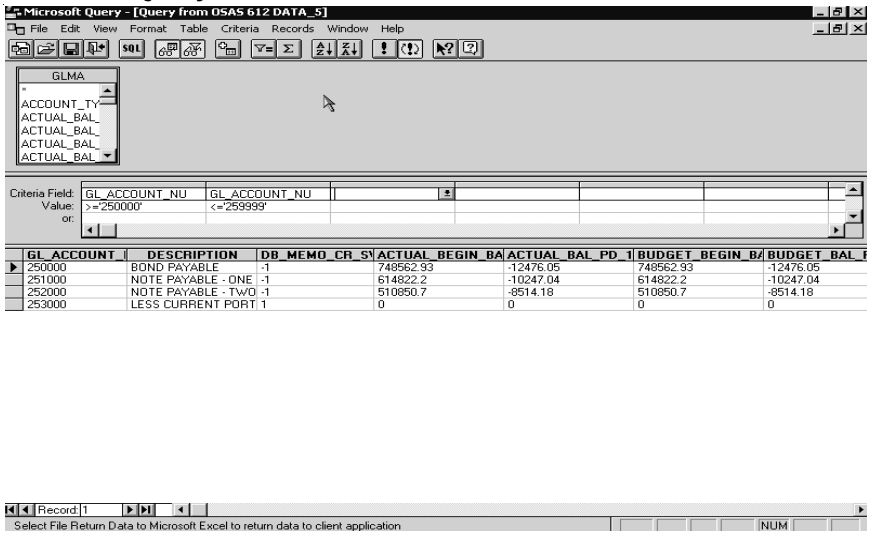
Two rows below Total Current Liabilities in Column B (cell B53 in this example) enter Long Term Liabilities and format the cell any way you want.

General Ledger Balance Sheet



Copy the Current Liabilities account section, including the totals and Paste the cells in the Long Term Liabilities section.

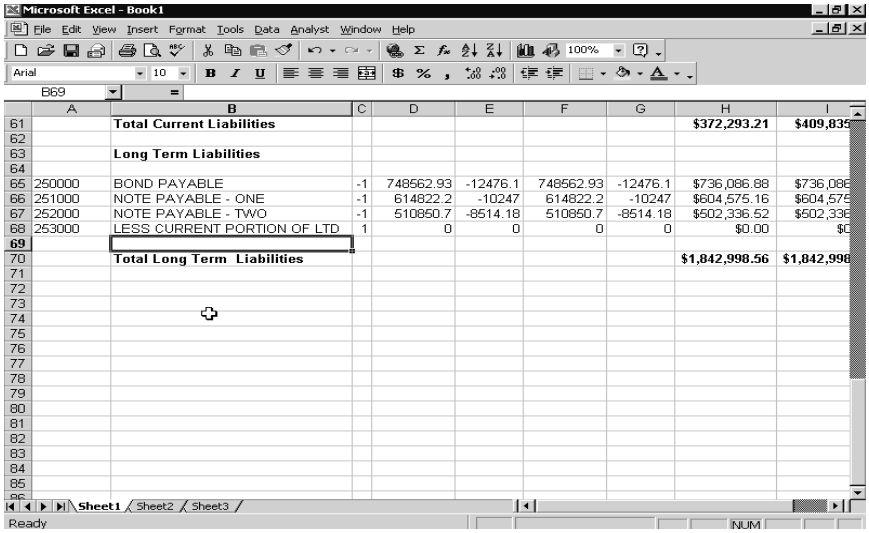
Microsoft Query



Edit the query using Microsoft Query or the Query Wizard. Add the criteria for accounts 250000-259999.

Return the data to Excel

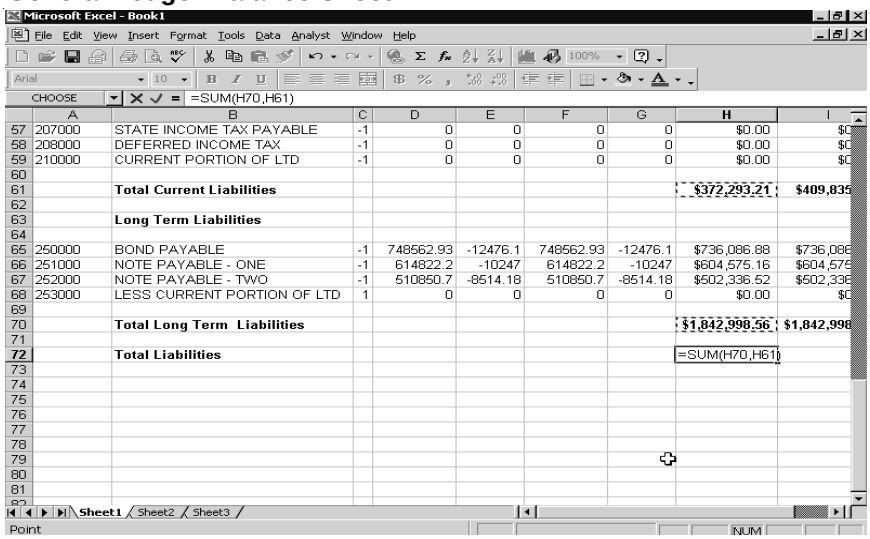
General Ledger Balance Sheet



	A	B	C	D	E	F	G	H	I
61		**Total Current Liabilities**						**$372,293.21**	**$409,835**
62									
63		**Long Term Liabilities**							
64									
65	250000	BOND PAYABLE	-1	748562.93	-12476.1	748562.93	-12476.1	$736,086.88	$736,08
66	251000	NOTE PAYABLE - ONE	-1	614822.2	-10247	614822.2	-10247	$604,575.16	$604,57
67	252000	NOTE PAYABLE - TWO	-1	510850.7	-8514.18	510850.7	-8514.18	$502,336.52	$502,33
68	253000	LESS CURRENT PORTION OF LTD	1	0	0	0	0	$0.00	$0
69									
70		**Total Long Term Liabilities**						**$1,842,998.56**	**$1,842,998**
71									
72									
73									
74									
75									
76									
77									
78									
79									
80									
81									
82									
83									
84									
85									

Change the Total Current Liabilities label to Total Long Term Liabilities

General Ledger Balance Sheet



	A	B	C	D	E	F	G	H	I
57	207000	STATE INCOME TAX PAYABLE	-1	0	0	0	0	$0.00	$0
58	208000	DEFERRED INCOME TAX	-1	0	0	0	0	$0.00	$0
59	210000	CURRENT PORTION OF LTD	-1	0	0	0	0	$0.00	$0
60									
61		**Total Current Liabilities**						**$372,293.21**	**$409,835**
62									
63		**Long Term Liabilities**							
64									
65	250000	BOND PAYABLE	-1	748562.93	-12476.1	748562.93	-12476.1	$736,086.88	$736,08
66	251000	NOTE PAYABLE - ONE	-1	614822.2	-10247	614822.2	-10247	$604,575.16	$604,57
67	252000	NOTE PAYABLE - TWO	-1	510850.7	-8514.18	510850.7	-8514.18	$502,336.52	$502,33
68	253000	LESS CURRENT PORTION OF LTD	1	0	0	0	0	$0.00	$0
69									
70		**Total Long Term Liabilities**						**$1,842,998.56**	**$1,842,998**
71									
72		**Total Liabilities**						=SUM(H70,H61)	
73									
74									
75									
76									
77									
78									
79									
80									
81									

Next, create a subtotal for all Liability accounts.

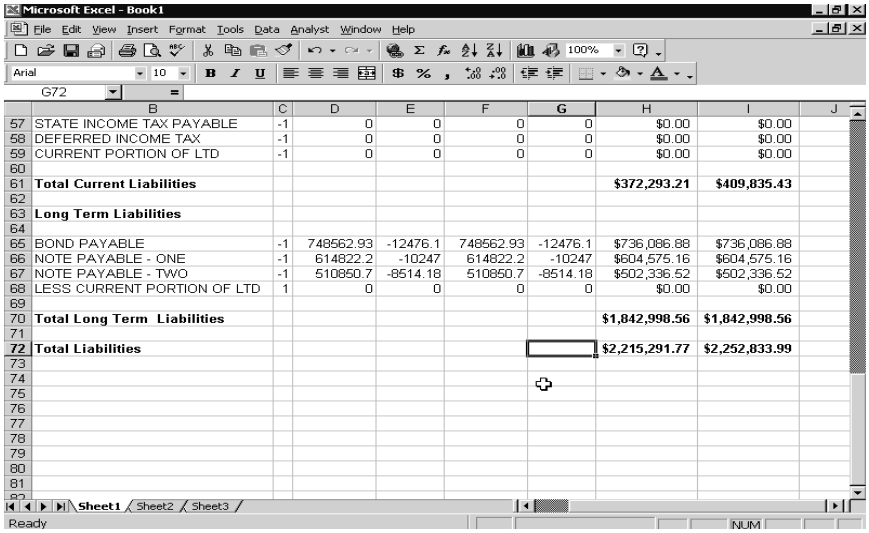
Two rows below Total Long Term Liabilities in column B (Cell B72 in this example) enter Total Liabilities and format the cell.

In column H (cell H72 in this example) create a subtotal for all Current Year Liabilities by adding the Total Current Liabilities and Total Long Term Liabilities.

Enter the formula **=SUM(H70,H61)**

Press Enter to display the total and format the cell.

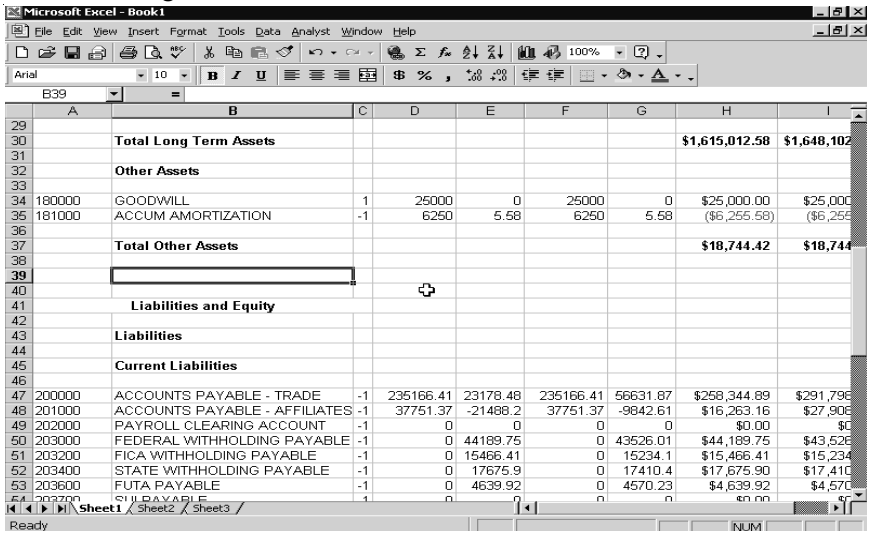
General Ledger Balance Sheet



	B	C	D	E	F	G	H	I	J
57	STATE INCOME TAX PAYABLE	-1	0	0	0	0	$0.00	$0.00	
58	DEFERRED INCOME TAX	-1	0	0	0	0	$0.00	$0.00	
59	CURRENT PORTION OF LTD	-1	0	0	0	0	$0.00	$0.00	
60									
61	**Total Current Liabilities**						**$372,293.21**	**$409,835.43**	
62									
63	**Long Term Liabilities**								
64									
65	BOND PAYABLE	-1	748562.93	-12476.1	748562.93	-12476.1	$736,086.88	$736,086.88	
66	NOTE PAYABLE - ONE	-1	614822.2	-10247	614822.2	-10247	$604,575.16	$604,575.16	
67	NOTE PAYABLE - TWO	-1	510850.7	-8514.18	510850.7	-8514.18	$502,336.52	$502,336.52	
68	LESS CURRENT PORTION OF LTD	1	0	0	0	0	$0.00	$0.00	
69									
70	**Total Long Term Liabilities**						**$1,842,998.56**	**$1,842,998.56**	
71									
72	**Total Liabilities**						**$2,215,291.77**	**$2,252,833.99**	
73									
74									
75									
76									
77									
78									
79									
80									
81									

To get the Total Liabilities for the Budget column, repeat the steps for Column H in column I or click and drag the formula from H to I.

General Ledger Balance Sheet

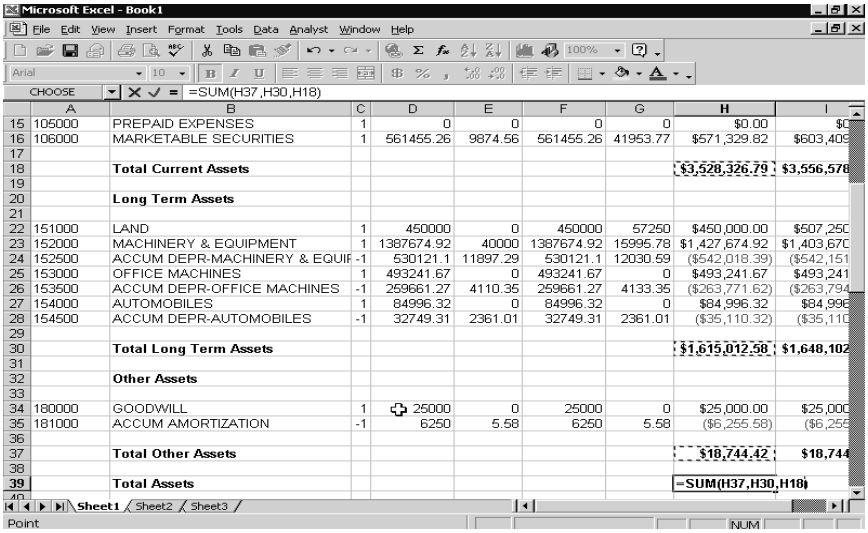


	A	B	C	D	E	F	G	H	I
29									
30		**Total Long Term Assets**						**$1,615,012.58**	**$1,648,102**
31									
32		**Other Assets**							
33									
34	180000	GOODWILL	1	25000	0	25000	0	$25,000.00	$25,000
35	181000	ACCUM AMORTIZATION	-1	6250	5.58	6250	5.58	($6,255.58)	($6,255
36									
37		**Total Other Assets**						**$18,744.42**	**$18,744**
38									
39									
40									
41		**Liabilities and Equity**							
42									
43		**Liabilities**							
44									
45		**Current Liabilities**							
46									
47	200000	ACCOUNTS PAYABLE - TRADE	-1	235166.41	23178.48	235166.41	56631.87	$258,344.89	$291,798
48	201000	ACCOUNTS PAYABLE - AFFILIATES	-1	37751.37	-21488.2	37751.37	-9842.61	$16,263.16	$27,908
49	202000	PAYROLL CLEARING ACCOUNT	-1	0	0	0	0	$0.00	$0
50	203000	FEDERAL WITHHOLDING PAYABLE	-1	0	44189.75	0	43526.01	$44,189.75	$43,526
51	203200	FICA WITHHOLDING PAYABLE	-1	0	15466.41	0	15234.1	$15,466.41	$15,234
52	203400	STATE WITHHOLDING PAYABLE	-1	0	17675.9	0	17410.4	$17,675.90	$17,410
53	203600	FUTA PAYABLE	-1	0	4639.92	0	4570.23	$4,639.92	$4,570
54	203700	SUI PAYABLE	-1	0	0	0	0	$0.00	$0

After adding the Total Liabilities row, we realize we did not add a row for the Total Assets.

Insert two rows below the Total Other Assets

General Ledger Balance Sheet



	A	B	C	D	E	F	G	H	I
15	105000	PREPAID EXPENSES	1	0	0	0	0	$0.00	$0
16	106000	MARKETABLE SECURITIES	1	561455.26	9874.56	561455.26	41953.77	$571,329.82	$603,409
17									
18		**Total Current Assets**						**$3,528,326.79**	**$3,556,578**
19									
20		**Long Term Assets**							
21									
22	151000	LAND	1	450000	0	450000	57250	$450,000.00	$507,250
23	152000	MACHINERY & EQUIPMENT	1	1387674.92	40000	1387674.92	15995.78	$1,427,674.92	$1,403,670
24	152500	ACCUM DEPR-MACHINERY & EQUIP	-1	530121.1	11897.29	530121.1	12030.59	($542,018.39)	($542,151
25	153000	OFFICE MACHINES	1	493241.67	0	493241.67	0	$493,241.67	$493,241
26	153500	ACCUM DEPR-OFFICE MACHINES	-1	259661.27	4110.35	259661.27	4133.35	($263,771.62)	($263,794
27	154000	AUTOMOBILES	1	84996.32	0	84996.32	0	$84,996.32	$84,996
28	154500	ACCUM DEPR-AUTOMOBILES	-1	32749.31	2361.01	32749.31	2361.01	($35,110.32)	($35,110
29									
30		**Total Long Term Assets**						**$1,615,012.58**	**$1,648,102**
31									
32		**Other Assets**							
33									
34	180000	GOODWILL	1	25000	0	25000	0	$25,000.00	$25,000
35	181000	ACCUM AMORTIZATION	-1	6250	5.58	6250	5.58	($6,255.58)	($6,255
36									
37		**Total Other Assets**						**$18,744.42**	**$18,744**
38									
39		**Total Assets**						**=SUM(H37,H30,H18)**	

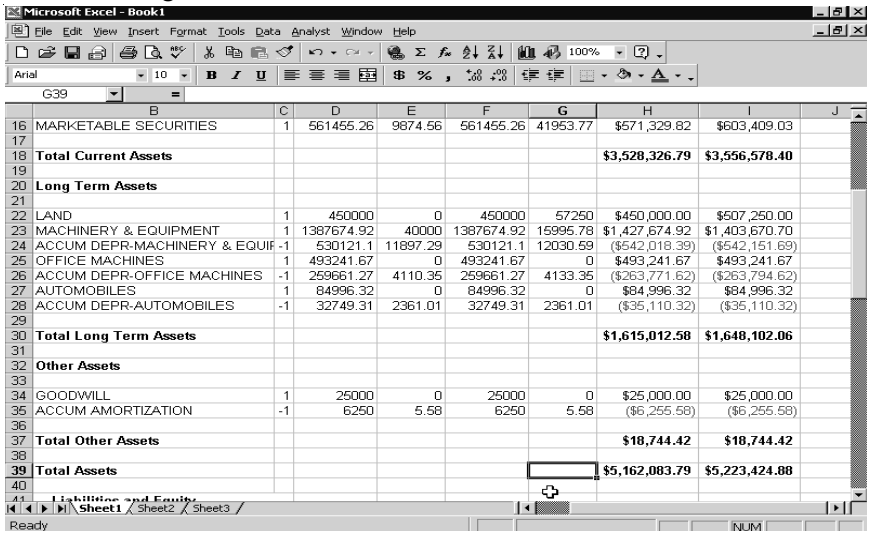
In column B (cell B39 in this example) enter Total Assets and format the cell.

In Column H (cell H39) enter a formula to add the Total Current Assets, Total Long Term Assets and Total Other Assets.

Enter the following formula: **=SUM(H37,H30,H18)**

Press Enter to display the total.

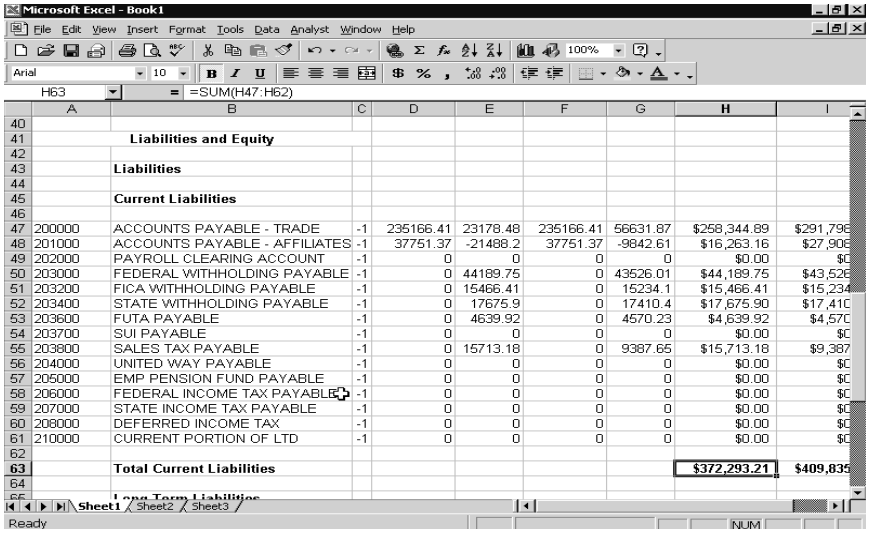
General Ledger Balance Sheet



	B	C	D	E	F	G	H	I	J
16	MARKETABLE SECURITIES	1	561455.26	9874.56	561455.26	41953.77	$571,329.82	$603,409.03	
17									
18	**Total Current Assets**						**$3,528,326.79**	**$3,556,578.40**	
19									
20	**Long Term Assets**								
21									
22	LAND	1	450000	0	450000	57250	$450,000.00	$507,250.00	
23	MACHINERY & EQUIPMENT	1	1387674.92	40000	1387674.92	15995.78	$1,427,674.92	$1,403,670.70	
24	ACCUM DEPR-MACHINERY & EQUIP	-1	530121.1	11897.29	530121.1	12030.59	($542,018.39)	($542,151.69)	
25	OFFICE MACHINES	1	493241.67	0	493241.67	0	$493,241.67	$493,241.67	
26	ACCUM DEPR-OFFICE MACHINES	-1	259661.27	4110.35	259661.27	4133.35	($263,771.62)	($263,794.62)	
27	AUTOMOBILES	1	84996.32	0	84996.32	0	$84,996.32	$84,996.32	
28	ACCUM DEPR-AUTOMOBILES	-1	32749.31	2361.01	32749.31	2361.01	($35,110.32)	($35,110.32)	
29									
30	**Total Long Term Assets**						**$1,615,012.58**	**$1,648,102.06**	
31									
32	**Other Assets**								
33									
34	GOODWILL	1	25000	0	25000	0	$25,000.00	$25,000.00	
35	ACCUM AMORTIZATION	-1	6250	5.58	6250	5.58	($6,255.58)	($6,255.58)	
36									
37	**Total Other Assets**						**$18,744.42**	**$18,744.42**	
38									
39	**Total Assets**						**$5,162,083.79**	**$5,223,424.88**	
40									

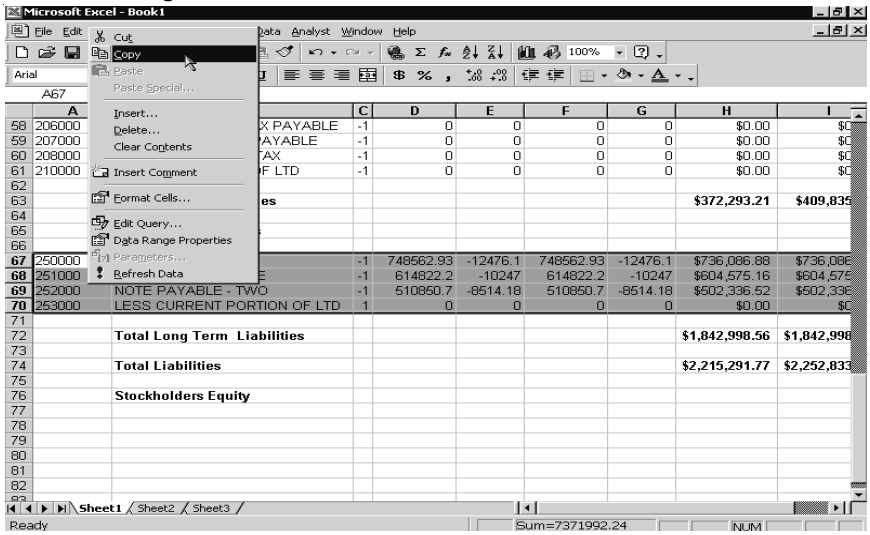
Repeat the process for Column I (cell I39) or click and drag the formula from column H to Column I.

General Ledger Balance Sheet



We added 2 rows to the spreadsheet. If we check any of the totals below the added rows, we should see that the formula has changed to reflect the changes made above.

General Ledger Balance Sheet

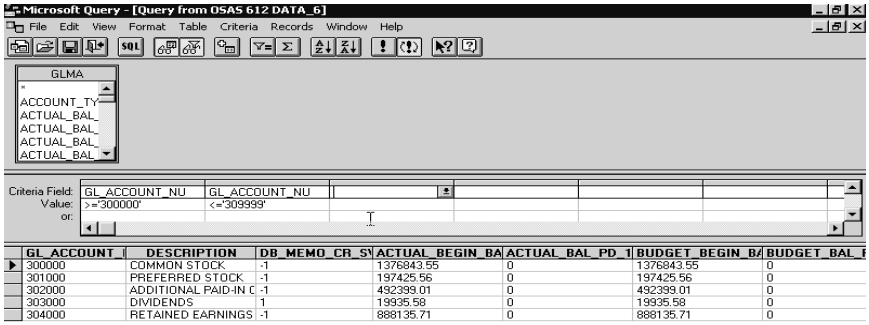


The last section of this balance sheet is the Stockholders Equity. The accounts for this range are 300000-999997. For accounts 300000-399999 we want to show all the detail and for accounts 400000-999997 we only want to see the subtotal labeled as Net Profit.

First, two rows below the Total Liabilities in column B (Cell B76 in this example), enter Stockholders Equity and format the cells.

Copy the Long Term Liabilities section, but do not include the totals. Paste the section two rows below the Stockholders Equity in column A (Cell A78).

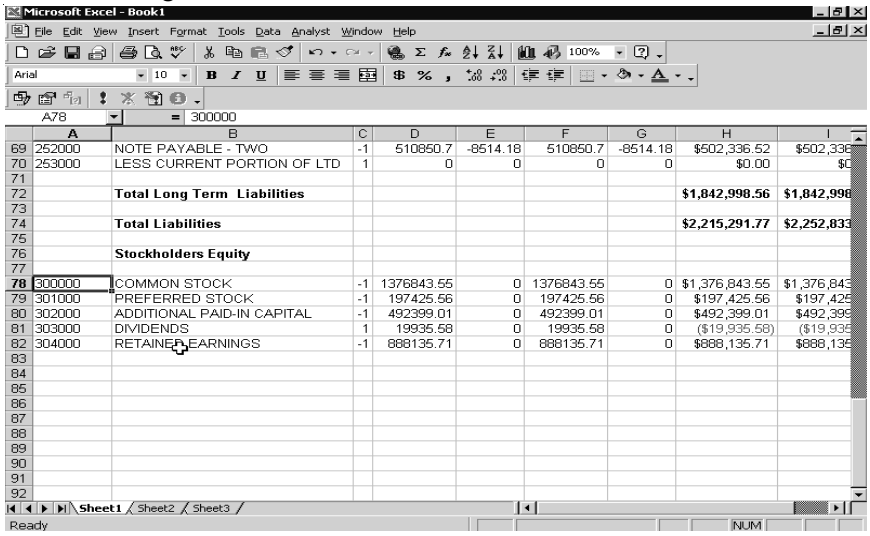
Microsoft Query



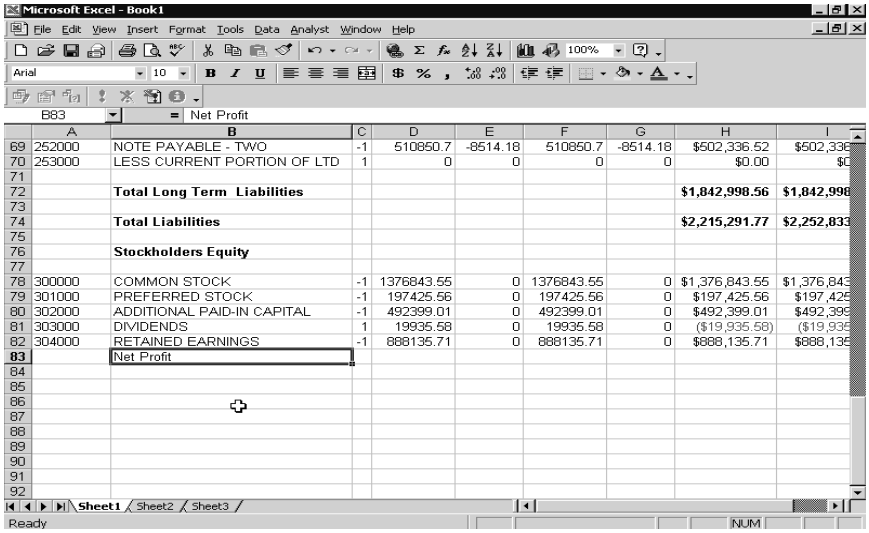
Edit the query using Microsoft Query or the Query Wizard. Change the criteria to “greater than or equal to” 3000000 and “less than or equal to” 399999.

Return the data to Excel

General Ledger Balance Sheet



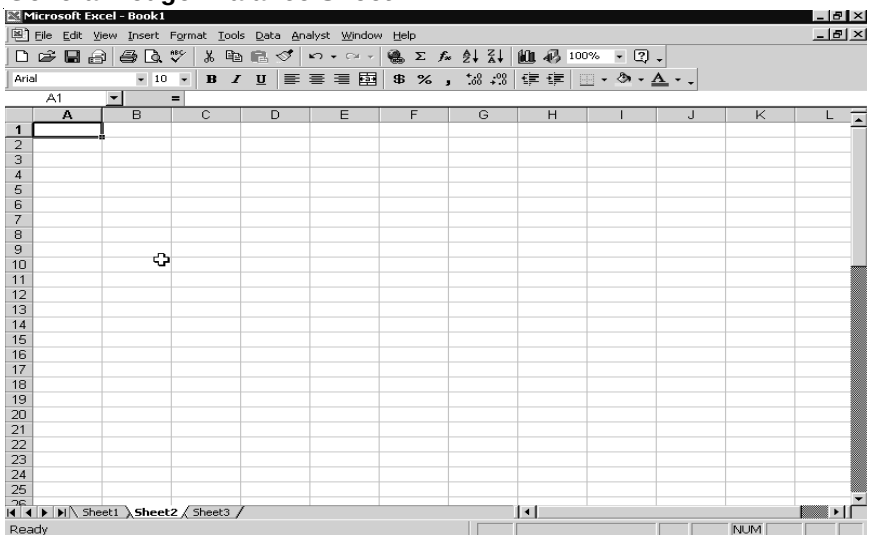
General Ledger Balance Sheet



	A	B	C	D	E	F	G	H	I
69	252000	NOTE PAYABLE - TWO	-1	510850.7	-8514.18	510850.7	-8514.18	$502,336.52	$502,336
70	253000	LESS CURRENT PORTION OF LTD	1	0	0	0	0	$0.00	$0
71									
72		**Total Long Term Liabilities**						**$1,842,998.56**	**$1,842,998**
73									
74		**Total Liabilities**						**$2,215,291.77**	**$2,252,833**
75									
76		**Stockholders Equity**							
77									
78	300000	COMMON STOCK	-1	1376843.55	0	1376843.55	0	$1,376,843.55	$1,376,843
79	301000	PREFERRED STOCK	-1	197425.56	0	197425.56	0	$197,425.56	$197,425
80	302000	ADDITIONAL PAID-IN CAPITAL	-1	492399.01	0	492399.01	0	$492,399.01	$492,399
81	303000	DIVIDENDS	1	19935.58	0	19935.58	0	($19,935.58)	($19,935
82	304000	RETAINED EARNINGS	-1	888135.71	0	888135.71	0	$888,135.71	$888,135
83		Net Profit							
84									
85									
86									
87									
88									
89									
90									
91									
92									

Select the first blank cell in Column B (cell B83 in this example) and enter Net Profit.

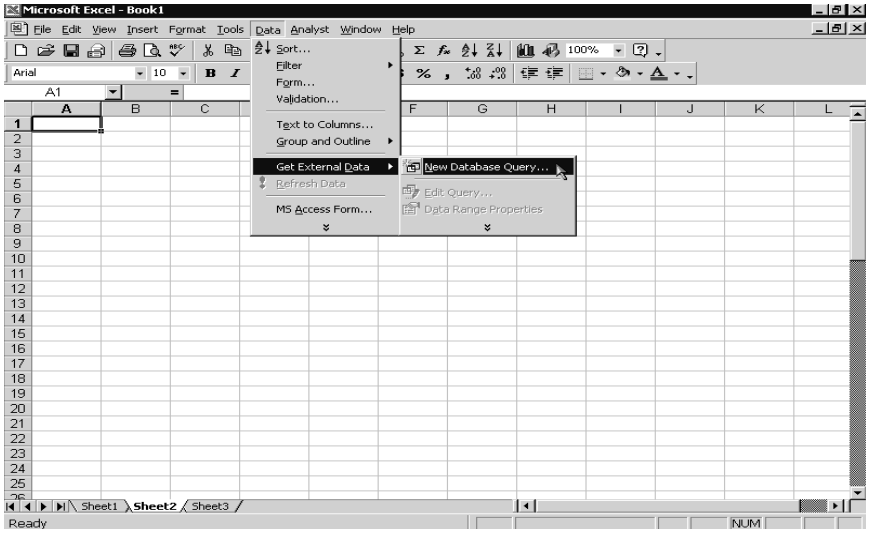
General Ledger Balance Sheet



Accounts 400000-999997 make up the Net Profit section but on the balance sheet we only want to display the subtotal for that account range, and not all the details. To do this we will create a query for that range on a different sheet and link to the total from the balance sheet.

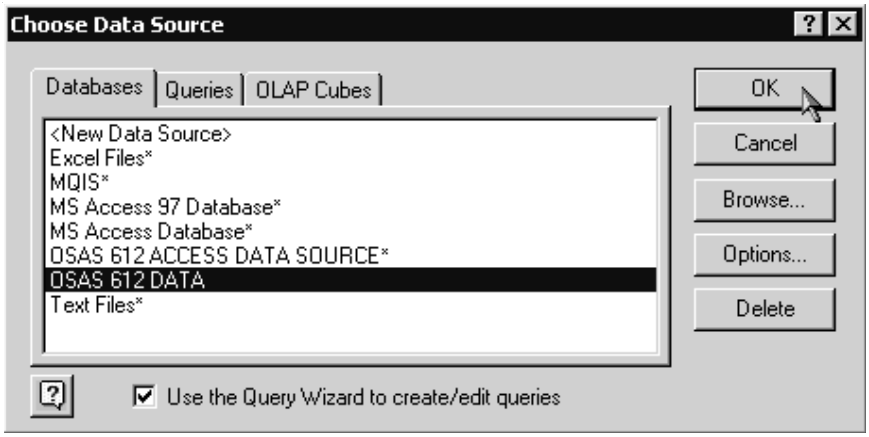
Click the Sheet2 tab.

General Ledger Balance Sheet



From the Data menu select Get External Data followed by New Database Query[20].

Choose Data Source



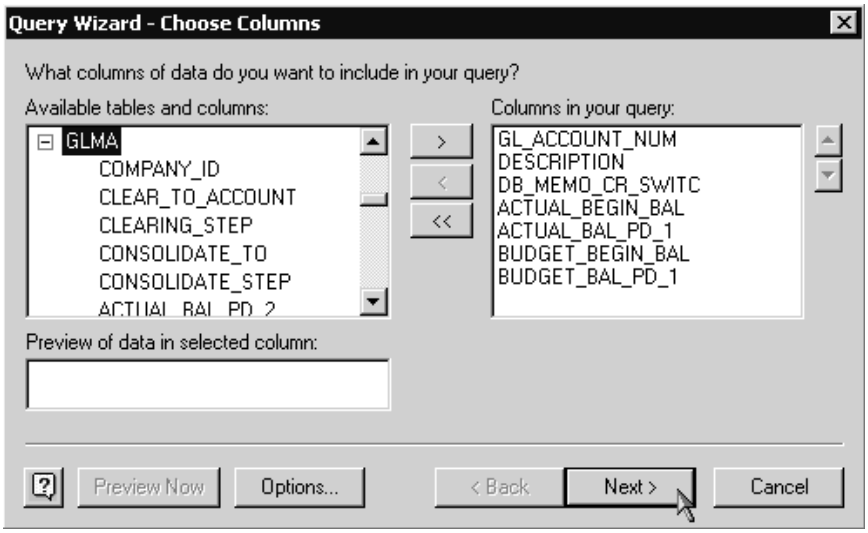
The Choose Data Source box is displayed.

Select the OSAS 612 DATA source created earlier

Check the box for Use the Query Wizard to create/edit queries.

20.With Excel 97 select Get External Data followed by Create New query. With Excel 2002 select Import External Data followed by New Database Query.

Query Wizard – Choose Columns



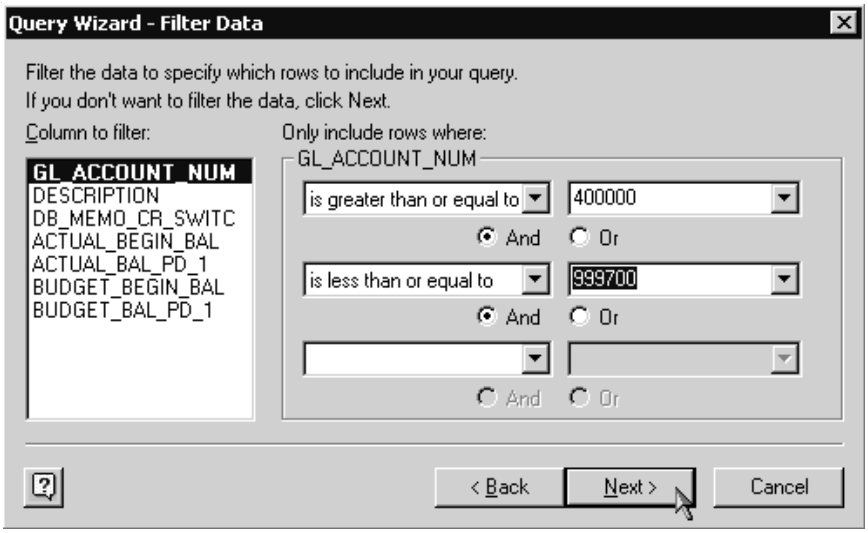
The Query Wizard – Choose Columns box is displayed.

Select the tables (files) and columns (fields) for the query.

Select the same fields from the **GLMA** table. Choose the **GL_ACCOUNT_NUM**, **DESCRIPTION**, **DB_MEMO_CR_SWITC**, **ACTUAL_BEGIN_BAL**, **ACTUAL_BAL_PD_1**, **BUDGET_BEGIN_BAL**, and **BUDGET_BAL_PD_1** columns.

Click the Next button.

Query Wizard – Filter Data

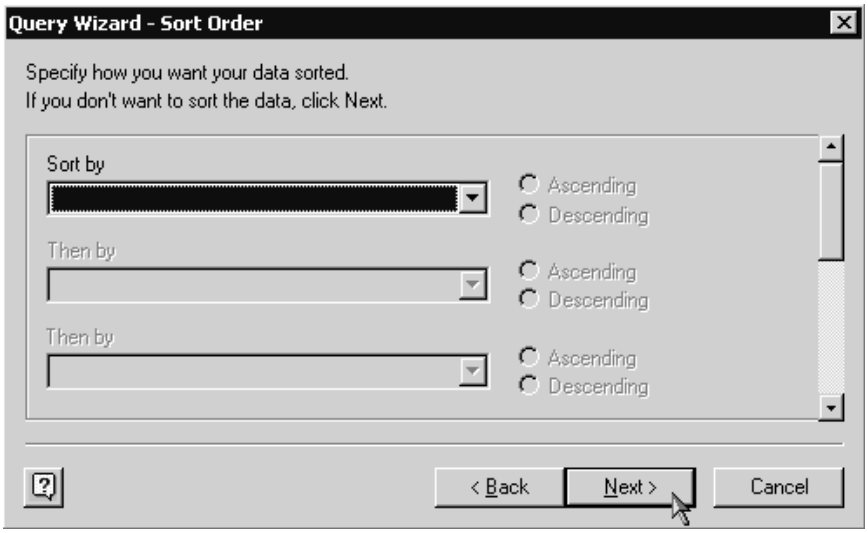


The Query Wizard – Filter Data box is displayed.

For this filter select “is greater than or equal to” 400000 And “is less than or equal to” 999700.

Click the Next button

Query Wizard – Sort Order



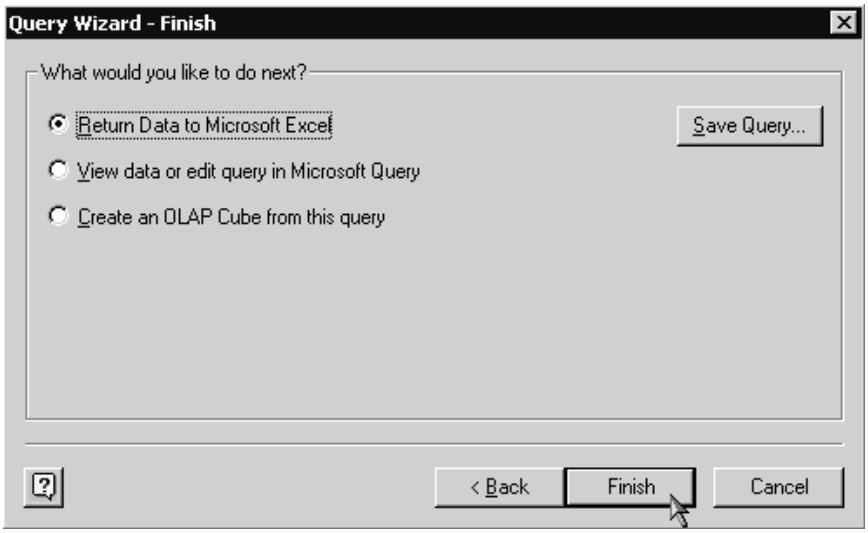
The Query Wizard – Sort Order box is displayed.

Select the order to sort the rows by.

Do not sort this spreadsheet.

Click the Next button.

Query Wizard – Finish

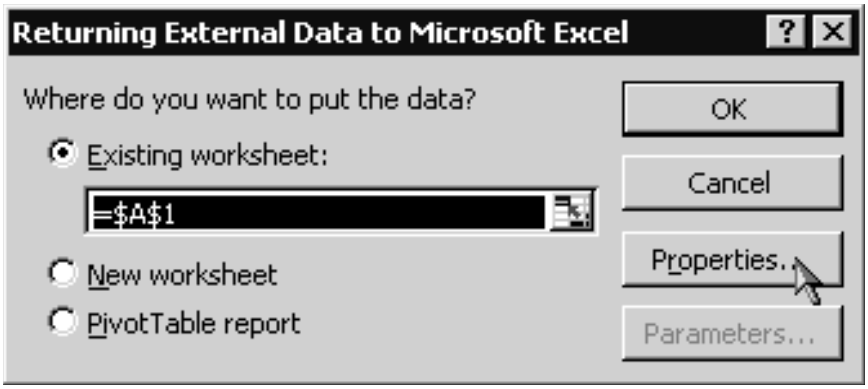


The Query Wizard – Finish box is displayed.

Select where you want to put the data.

Select Return Data to Microsoft Excel and click the Finish button.

Returning External Data to Microsoft Excel

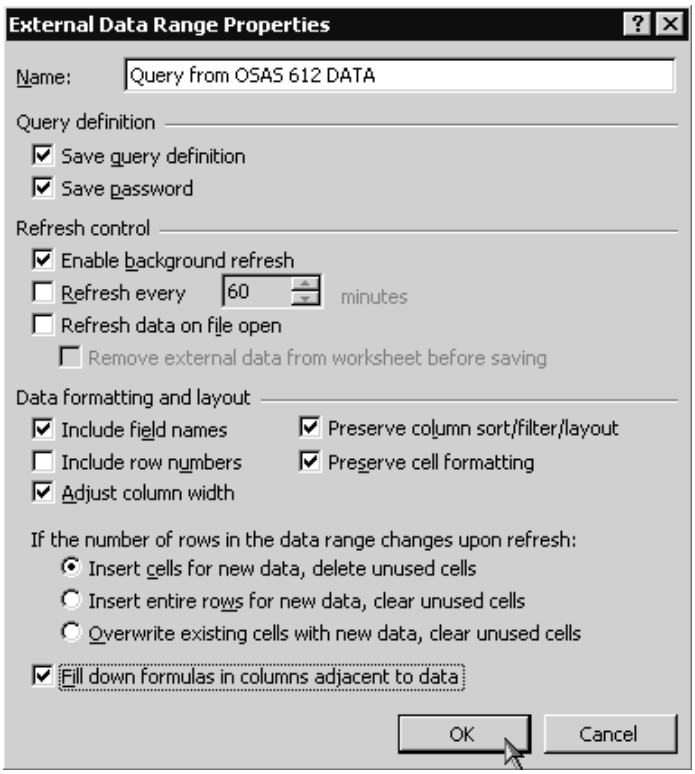


The Returning External Data to Microsoft Excel box is displayed.

Select where to place the data in Excel.

For this spreadsheet, click the Properties button.

External Data Range Properties



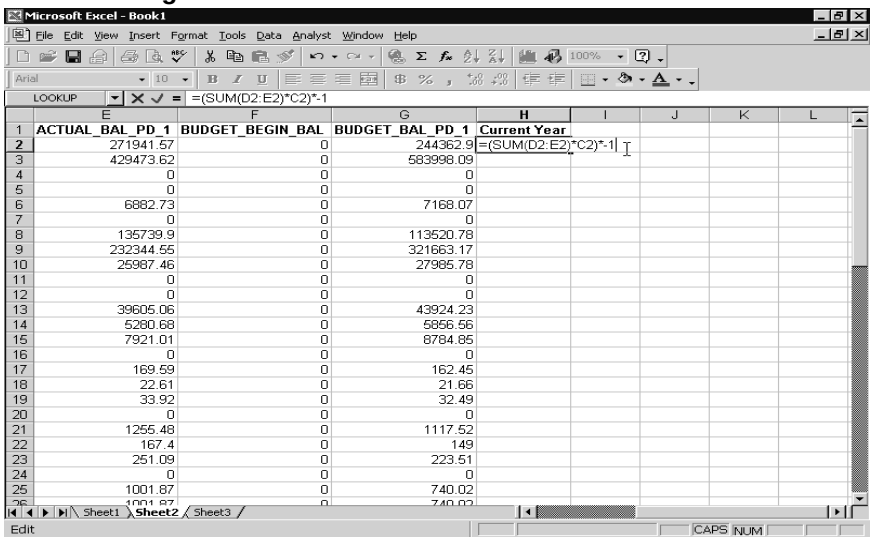
The External Data Range Properties box is displayed.

Check Fill down formulas in columns adjacent to data. Click the OK button.

The Returning External Data to Microsoft Excel box is re-displayed.

The cell selected when we chose Get External Data should be displayed in the Existing worksheet field. Click OK.

General Ledger Balance Sheet



	E	F	G	H	I	J	K	L
1	ACTUAL_BAL_PD_1	BUDGET_BEGIN_BAL	BUDGET_BAL_PD_1	Current Year				
2	271941.57	0	244362.9	=(SUM(D2:E2)*C2)*-1				
3	429473.62	0	583998.09					
4	0	0	0					
5	0	0	0					
6	6882.73	0	7168.07					
7	0	0	0					
8	135739.9	0	113520.78					
9	232344.55	0	321663.17					
10	25987.46	0	27985.78					
11	0	0	0					
12	0	0	0					
13	39605.06	0	43924.23					
14	5280.68	0	5856.56					
15	7921.01	0	8784.85					
16	0	0	0					
17	169.59	0	162.45					
18	22.61	0	21.66					
19	33.92	0	32.49					
20	0	0	0					
21	1255.48	0	1117.52					
22	167.4	0	149					
23	251.09	0	223.51					
24	0	0	0					
25	1001.87	0	740.02					

The data is imported with column headings.

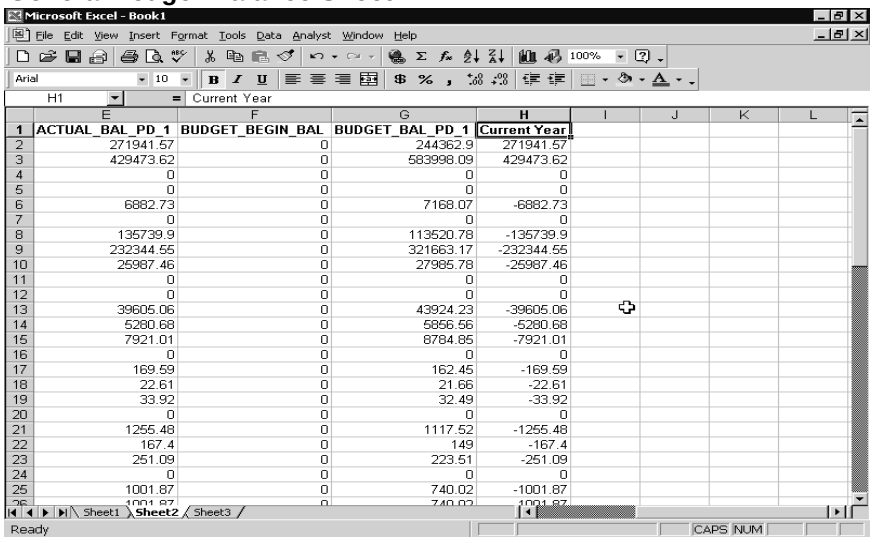
Create the Current Year column heading and enter a formula for the Actual End Balance for Period 1 using the Actual Beginning Balance, Actual Balance Period 1 and Debit/Memo/Credit Switch Fields.

The formula should be =(SUM(Dn:En)*Cn)*-1, just like the other Liability accounts.

In cell H2 enter **=(SUM(D2:E2)*C2)*-1**

Press Enter to display the total.

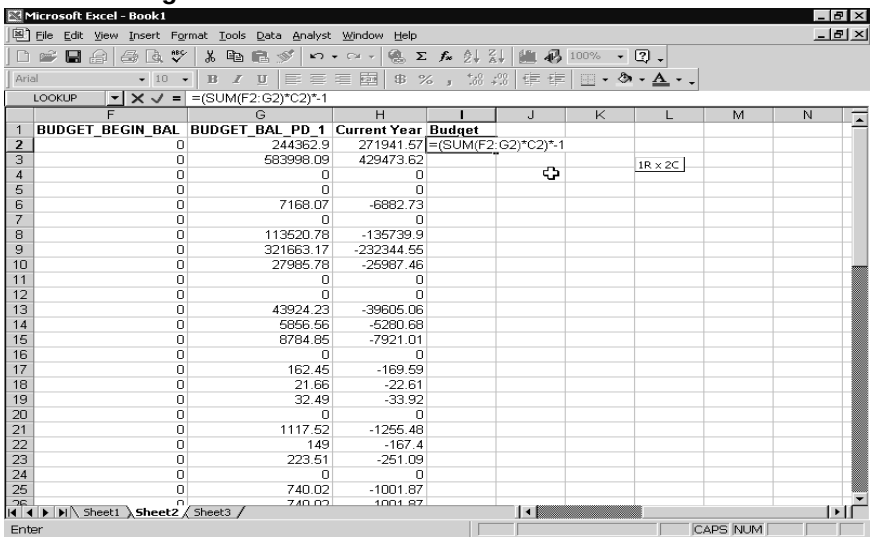
General Ledger Balance Sheet



	E	F	G	H	I	J	K	L
1	ACTUAL_BAL_PD_1	BUDGET_BEGIN_BAL	BUDGET_BAL_PD_1	Current Year				
2	271941.57	0	244362.9	271941.57				
3	429473.62	0	583998.09	429473.62				
4	0	0	0	0				
5	0	0	0	0				
6	6882.73	0	7168.07	-6882.73				
7	0	0	0	0				
8	135739.9	0	113520.78	-135739.9				
9	232344.55	0	321663.17	-232344.55				
10	25987.46	0	27985.78	-25987.46				
11	0	0	0	0				
12	0	0	0	0				
13	39605.06	0	43924.23	-39605.06				
14	5280.68	0	5856.56	-5280.68				
15	7921.01	0	8784.85	-7921.01				
16	0	0	0	0				
17	169.59	0	162.45	-169.59				
18	22.61	0	21.66	-22.61				
19	33.92	0	32.49	-33.92				
20	0	0	0	0				
21	1255.48	0	1117.52	-1255.48				
22	167.4	0	149	-167.4				
23	251.09	0	223.51	-251.09				
24	0	0	0	0				
25	1001.87	0	740.02	-1001.87				

Fill the remaining cells in column H with the total.

General Ledger Balance Sheet



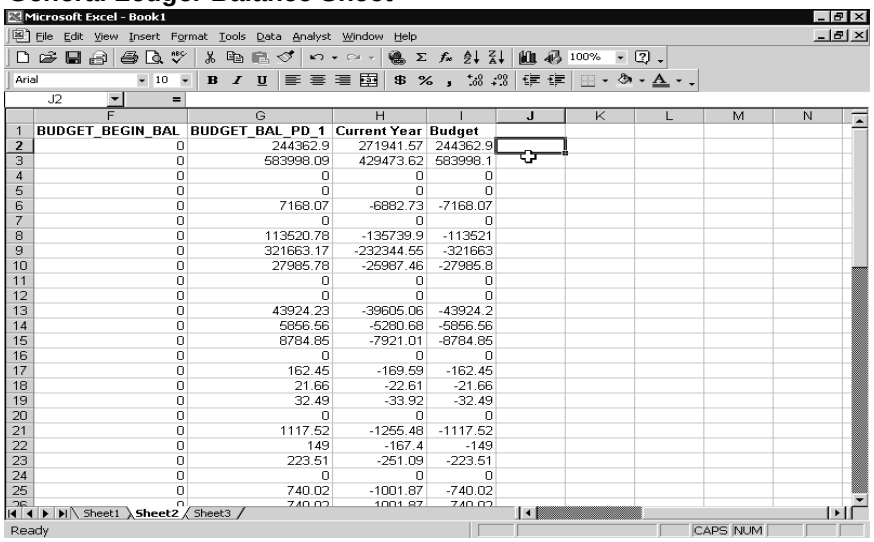
	F	G	H	I	J	K	L	M	N
1	BUDGET_BEGIN_BAL	BUDGET_BAL_PD_1	Current Year	Budget					
2	0	244362.9	271941.57	=(SUM(F2:G2)*C2)*-1					
3	0	583998.09	429473.62				1R x 2C		
4	0	0	0						
5	0	0	0						
6	0	7168.07	-6882.73						
7	0	0	0						
8	0	113520.78	-135739.9						
9	0	321663.17	-232344.55						
10	0	27985.78	-25987.46						
11	0	0	0						
12	0	0	0						
13	0	43924.23	-39605.06						
14	0	5856.56	-5280.68						
15	0	8784.85	-7921.01						
16	0	0	0						
17	0	162.45	-169.59						
18	0	21.66	-22.61						
19	0	32.49	-33.92						
20	0	0	0						
21	0	1117.52	-1255.48						
22	0	149	-167.4						
23	0	223.51	-251.09						
24	0	0	0						
25	0	740.02	-1001.87						

Next, in Column I, enter a Budget heading and create the formula for the Budget Balance for Period 1 using the Budget Beginning Balance, Budget Balance Period 1 and Debit\Memo\Credit Switch.

In cell I2 enter **=(SUM(F2:G2)*C2)*-1**

Press Enter to display the total.

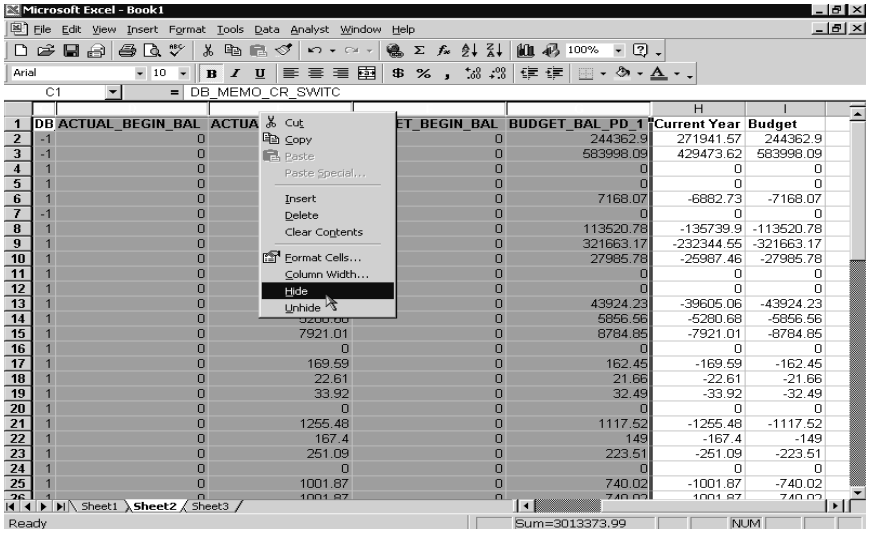
General Ledger Balance Sheet



	F	G	H	I	J	K	L	M	N
1	BUDGET_BEGIN_BAL	BUDGET_BAL_PD_1	Current Year	Budget					
2	0	244362.9	271941.57	244362.9					
3	0	583998.09	429473.62	583998.1					
4	0	0	0	0					
5	0	0	0	0					
6	0	7168.07	-6882.73	-7168.07					
7	0	0	0	0					
8	0	113520.78	-135739.9	-113521					
9	0	321663.17	-232344.55	-321663					
10	0	27985.78	-25987.46	-27985.8					
11	0	0	0	0					
12	0	0	0	0					
13	0	43924.23	-39605.06	-43924.2					
14	0	5856.56	-5280.68	-5856.56					
15	0	8784.85	-7921.01	-8784.85					
16	0	0	0	0					
17	0	162.45	-169.59	-162.45					
18	0	21.66	-22.61	-21.66					
19	0	32.49	-33.92	-32.49					
20	0	0	0	0					
21	0	1117.52	-1255.48	-1117.52					
22	0	149	-167.4	-149					
23	0	223.51	-251.09	-223.51					
24	0	0	0	0					
25	0	740.02	-1001.87	-740.02					

Fill the remaining cells in column I with the total.

General Ledger Balance Sheet

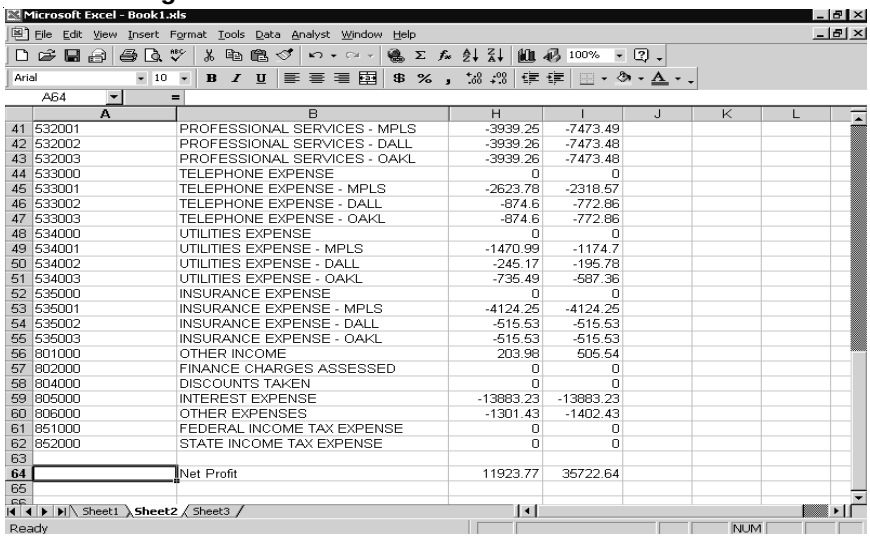


Next, we will hide columns C, D, E, F and G.

Click and highlight Columns C through G.

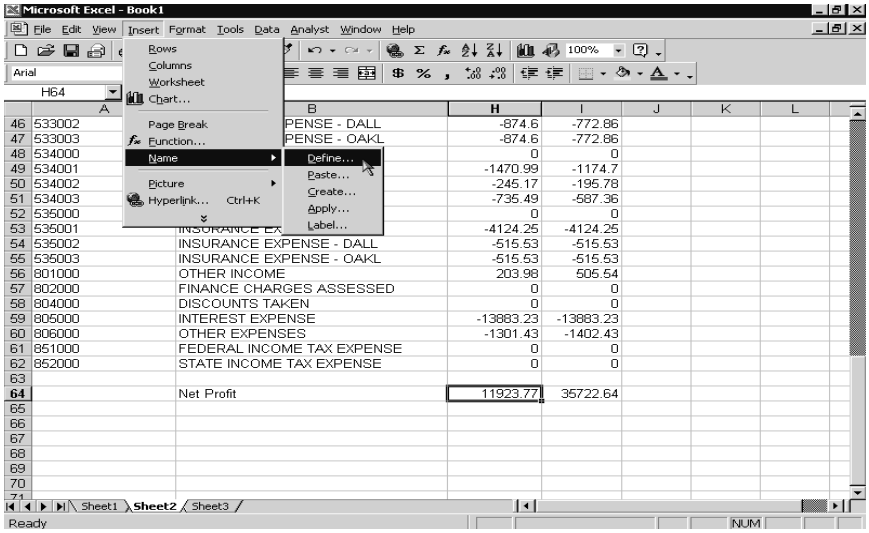
Right click and select Hide or select Window from the menu and choose Hide.

General Ledger Balance Sheet



Next, create a subtotal using the Sum or AutoSum functions, for the Net Profit amount for the Current Year and Budget columns. You can also create a Net Profit label.

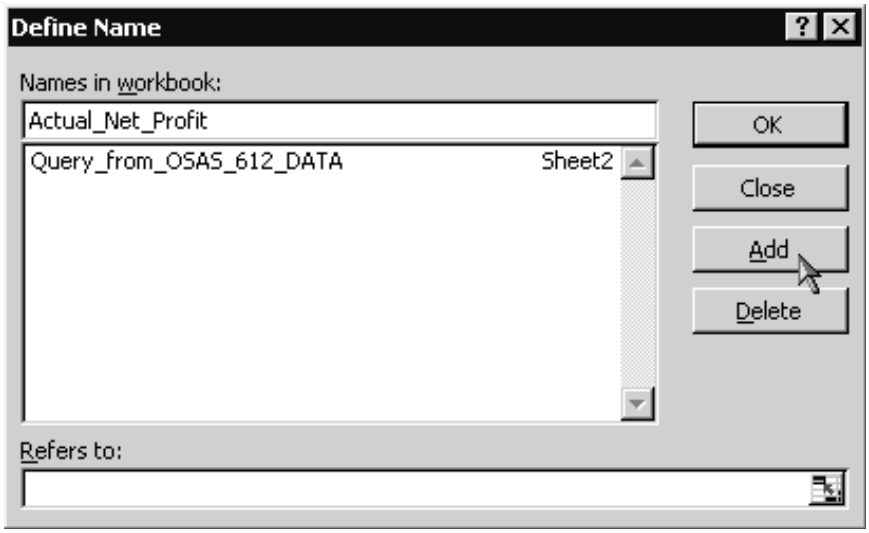
General Ledger Balance Sheet



Optionally, create a range name for the Current Year and Budget totals.

Click the Current Year total and select Insert from the menu followed by Name and choose Define.

Define Range Name

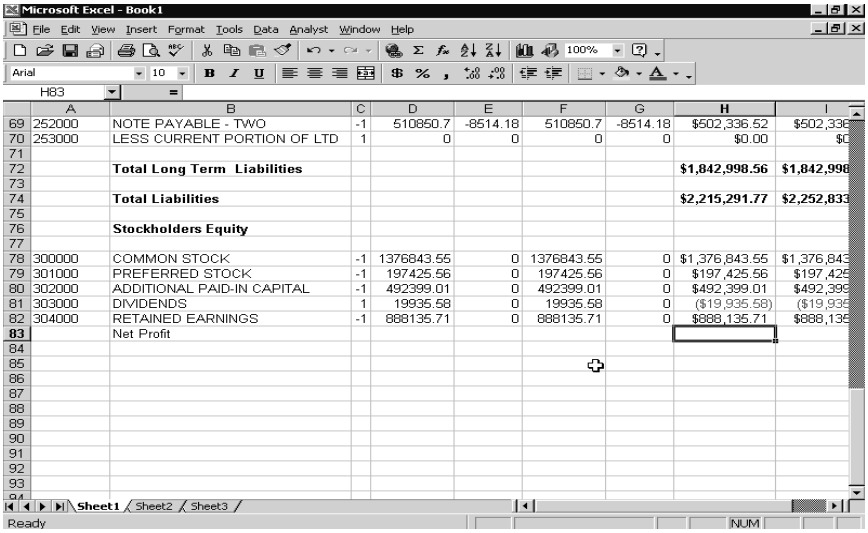


Enter a name without spaces and click the Add button.

Repeat the same steps for the Budget total

After both names are entered, click Close.

General Ledger Balance Sheet

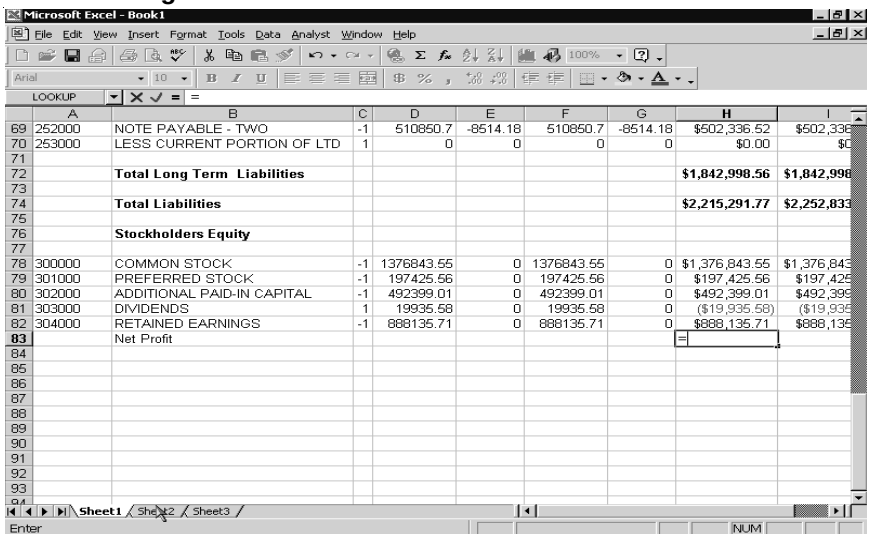


	A	B	C	D	E	F	G	H	I
69	252000	NOTE PAYABLE - TWO	-1	510850.7	-8514.18	510850.7	-8514.18	$502,336.52	$502,336
70	253000	LESS CURRENT PORTION OF LTD	1	0	0	0	0	$0.00	$0
71									
72		**Total Long Term Liabilities**						**$1,842,998.56**	**$1,842,998**
73									
74		**Total Liabilities**						**$2,215,291.77**	**$2,252,833**
75									
76		**Stockholders Equity**							
77									
78	300000	COMMON STOCK	-1	1376843.55	0	1376843.55	0	$1,376,843.55	$1,376,843
79	301000	PREFERRED STOCK	-1	197425.56	0	197425.56	0	$197,425.56	$197,425
80	302000	ADDITIONAL PAID-IN CAPITAL	-1	492399.01	0	492399.01	0	$492,399.01	$492,399
81	303000	DIVIDENDS	1	19935.58	0	19935.58	0	($19,935.58)	($19,935
82	304000	RETAINED EARNINGS	-1	888135.71	0	888135.71	0	$888,135.71	$888,135
83		Net Profit							
84									
85									
86									
87									
88									
89									
90									
91									
92									
93									

Next, link the Current Year and Budget Net Profit totals from the Balance sheet to the Net Profit fields on Sheet2.

Go back to the balance sheet. Select the cell in Column H next to the Net Profit label (cell H83 in this example).

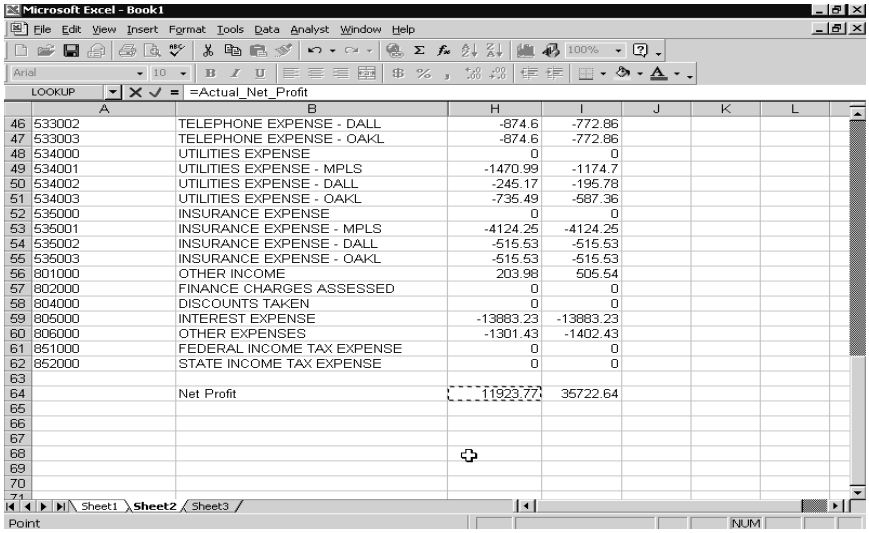
General Ledger Balance Sheet



	A	B	C	D	E	F	G	H	I
69	252000	NOTE PAYABLE - TWO	-1	510850.7	-8514.18	510850.7	-8514.18	$502,336.52	$502,336
70	253000	LESS CURRENT PORTION OF LTD	1	0	0	0	0	$0.00	$0
71									
72		**Total Long Term Liabilities**						**$1,842,998.56**	**$1,842,998**
73									
74		**Total Liabilities**						**$2,215,291.77**	**$2,252,833**
75									
76		**Stockholders Equity**							
77									
78	300000	COMMON STOCK	-1	1376843.55	0	1376843.55	0	$1,376,843.55	$1,376,843
79	301000	PREFERRED STOCK	-1	197425.56	0	197425.56	0	$197,425.56	$197,425
80	302000	ADDITIONAL PAID-IN CAPITAL	-1	492399.01	0	492399.01	0	$492,399.01	$492,399
81	303000	DIVIDENDS	1	19935.58	0	19935.58	0	($19,935.58)	($19,935
82	304000	RETAINED EARNINGS	-1	888135.71	0	888135.71	0	$888,135.71	$888,135
83		Net Profit						=	
84									
85									
86									
87									
88									
89									
90									
91									
92									
93									

Type = in the cell.

General Ledger Balance Sheet

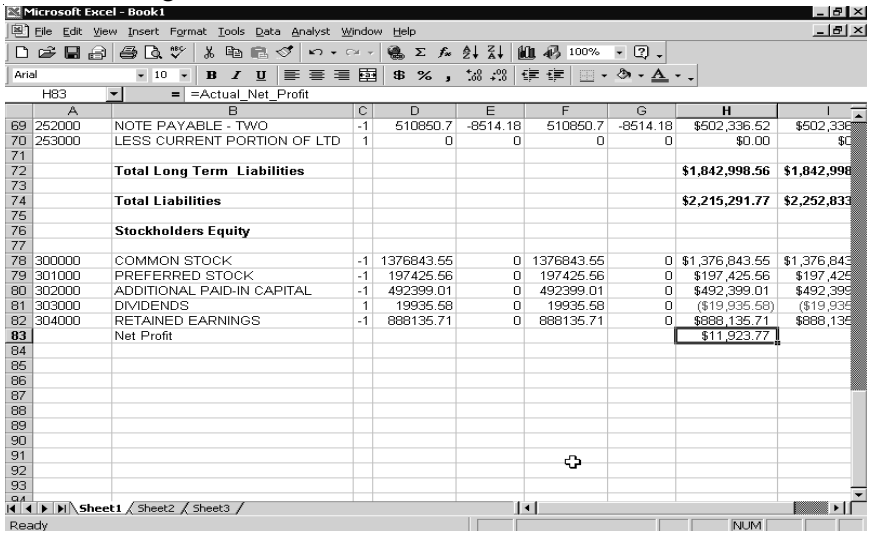


	A	B	H	I
46	533002	TELEPHONE EXPENSE - DALL	-874.6	-772.86
47	533003	TELEPHONE EXPENSE - OAKL	-874.6	-772.86
48	534000	UTILITIES EXPENSE	0	0
49	534001	UTILITIES EXPENSE - MPLS	-1470.99	-1174.7
50	534002	UTILITIES EXPENSE - DALL	-245.17	-195.78
51	534003	UTILITIES EXPENSE - OAKL	-735.49	-587.36
52	535000	INSURANCE EXPENSE	0	0
53	535001	INSURANCE EXPENSE - MPLS	-4124.25	-4124.25
54	535002	INSURANCE EXPENSE - DALL	-515.53	-515.53
55	535003	INSURANCE EXPENSE - OAKL	-515.53	-515.53
56	801000	OTHER INCOME	203.98	505.54
57	802000	FINANCE CHARGES ASSESSED	0	0
58	804000	DISCOUNTS TAKEN	0	0
59	805000	INTEREST EXPENSE	-13883.23	-13883.23
60	806000	OTHER EXPENSES	-1301.43	-1402.43
61	851000	FEDERAL INCOME TAX EXPENSE	0	0
62	852000	STATE INCOME TAX EXPENSE	0	0
63				
64		Net Profit	11923.77	35722.64
65				
66				
67				
68				
69				
70				

Click the Sheet2 tab and select the Current Year Net Profit total.

Press Enter

General Ledger Balance Sheet

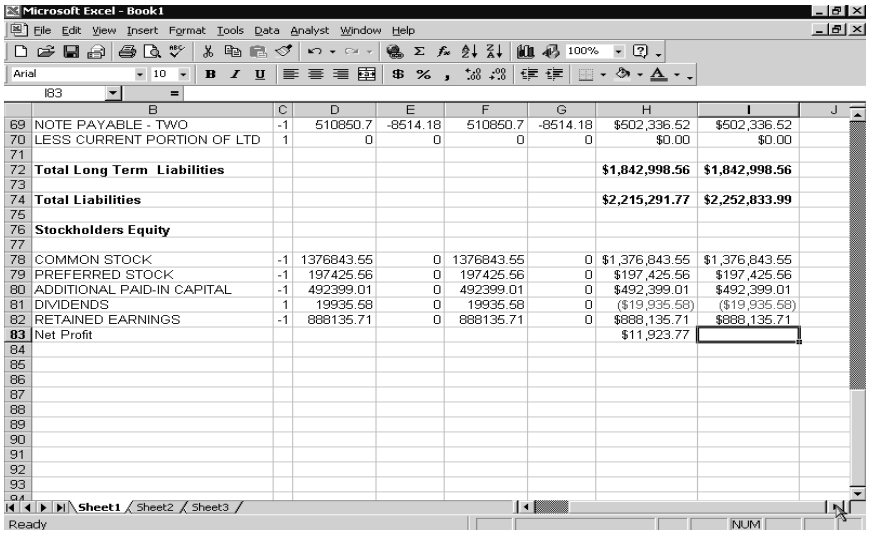


	A	B	C	D	E	F	G	H	I
69	252000	NOTE PAYABLE - TWO	-1	510850.7	-8514.18	510850.7	-8514.18	$502,336.52	$502,336
70	253000	LESS CURRENT PORTION OF LTD	1	0	0	0	0	$0.00	$0
71									
72		**Total Long Term Liabilities**						**$1,842,998.56**	**$1,842,998**
73									
74		**Total Liabilities**						**$2,215,291.77**	**$2,252,833**
75									
76		**Stockholders Equity**							
77									
78	300000	COMMON STOCK	-1	1376843.55	0	1376843.55	0	$1,376,843.55	$1,376,843
79	301000	PREFERRED STOCK	-1	197425.56	0	197425.56	0	$197,425.56	$197,425
80	302000	ADDITIONAL PAID-IN CAPITAL	-1	492399.01	0	492399.01	0	$492,399.01	$492,399
81	303000	DIVIDENDS	1	19935.58	0	19935.58	0	($19,935.58)	($19,935
82	304000	RETAINED EARNINGS	-1	888135.71	0	888135.71	0	$888,135.71	$888,135
83		Net Profit						$11,923.77	
84									
85									
86									
87									
88									
89									
90									
91									
92									
93									

The Current Year Net Profit amount should display on the Balance sheet.

Repeat the steps to get the Net Profit Budget amount on the Balance sheet.

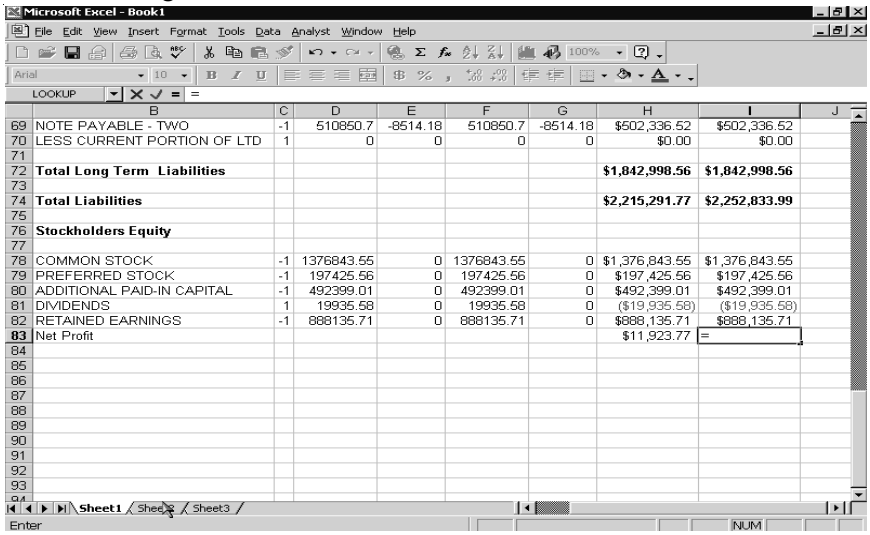
General Ledger Balance Sheet



	B	C	D	E	F	G	H	I	J
69	NOTE PAYABLE - TWO	-1	510850.7	-8514.18	510850.7	-8514.18	$502,336.52	$502,336.52	
70	LESS CURRENT PORTION OF LTD	1	0	0	0	0	$0.00	$0.00	
71									
72	**Total Long Term Liabilities**						**$1,842,998.56**	**$1,842,998.56**	
73									
74	**Total Liabilities**						**$2,215,291.77**	**$2,252,833.99**	
75									
76	**Stockholders Equity**								
77									
78	COMMON STOCK	-1	1376843.55	0	1376843.55	0	$1,376,843.55	$1,376,843.55	
79	PREFERRED STOCK	-1	197425.56	0	197425.56	0	$197,425.56	$197,425.56	
80	ADDITIONAL PAID-IN CAPITAL	-1	492399.01	0	492399.01	0	$492,399.01	$492,399.01	
81	DIVIDENDS	1	19935.58	0	19935.58	0	($19,935.58)	($19,935.58)	
82	RETAINED EARNINGS	-1	888135.71	0	888135.71	0	$888,135.71	$888,135.71	
83	Net Profit						$11,923.77		
84									
85									
86									
87									
88									
89									
90									
91									
92									
93									
94									

Select the cell in Column I next to the Net Profit label (cell I83 in this example).

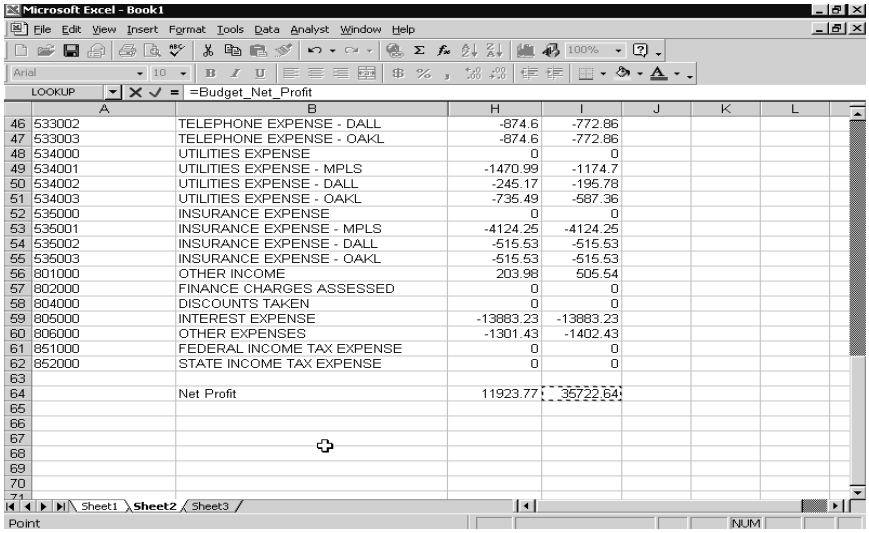
General Ledger Balance Sheet



	B	C	D	E	F	G	H	I	J
69	NOTE PAYABLE - TWO	-1	510850.7	-8514.18	510850.7	-8514.18	$502,336.52	$502,336.52	
70	LESS CURRENT PORTION OF LTD	1	0	0	0	0	$0.00	$0.00	
71									
72	**Total Long Term Liabilities**						**$1,842,998.56**	**$1,842,998.56**	
73									
74	**Total Liabilities**						**$2,215,291.77**	**$2,252,833.99**	
75									
76	**Stockholders Equity**								
77									
78	COMMON STOCK	-1	1376843.55	0	1376843.55	0	$1,376,843.55	$1,376,843.55	
79	PREFERRED STOCK	-1	197425.56	0	197425.56	0	$197,425.56	$197,425.56	
80	ADDITIONAL PAID-IN CAPITAL	-1	492399.01	0	492399.01	0	$492,399.01	$492,399.01	
81	DIVIDENDS	1	19935.58	0	19935.58	0	($19,935.58)	($19,935.58)	
82	RETAINED EARNINGS	-1	888135.71	0	888135.71	0	$888,135.71	$888,135.71	
83	Net Profit						$11,923.77	=	
84									
85									
86									
87									
88									
89									
90									
91									
92									
93									
94									

Type = in the cell.

General Ledger Balance Sheet

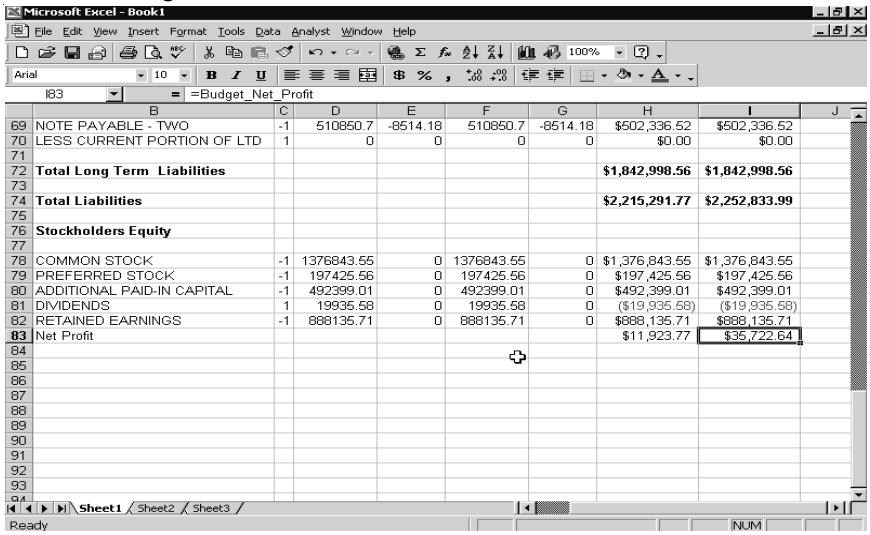


	A	B	H	I
46	533002	TELEPHONE EXPENSE - DALL	-874.6	-772.86
47	533003	TELEPHONE EXPENSE - OAKL	-874.6	-772.86
48	534000	UTILITIES EXPENSE	0	0
49	534001	UTILITIES EXPENSE - MPLS	-1470.99	-1174.7
50	534002	UTILITIES EXPENSE - DALL	-245.17	-195.78
51	534003	UTILITIES EXPENSE - OAKL	-735.49	-587.36
52	535000	INSURANCE EXPENSE	0	0
53	535001	INSURANCE EXPENSE - MPLS	-4124.25	-4124.25
54	535002	INSURANCE EXPENSE - DALL	-515.53	-515.53
55	535003	INSURANCE EXPENSE - OAKL	-515.53	-515.53
56	801000	OTHER INCOME	203.98	505.54
57	802000	FINANCE CHARGES ASSESSED	0	0
58	804000	DISCOUNTS TAKEN	0	0
59	805000	INTEREST EXPENSE	-13883.23	-13883.23
60	806000	OTHER EXPENSES	-1301.43	-1402.43
61	851000	FEDERAL INCOME TAX EXPENSE	0	0
62	852000	STATE INCOME TAX EXPENSE	0	0
63				
64		Net Profit	11923.77	35722.64

Click the Sheet2 tab and select the Budget Net Profit total.

Press Enter

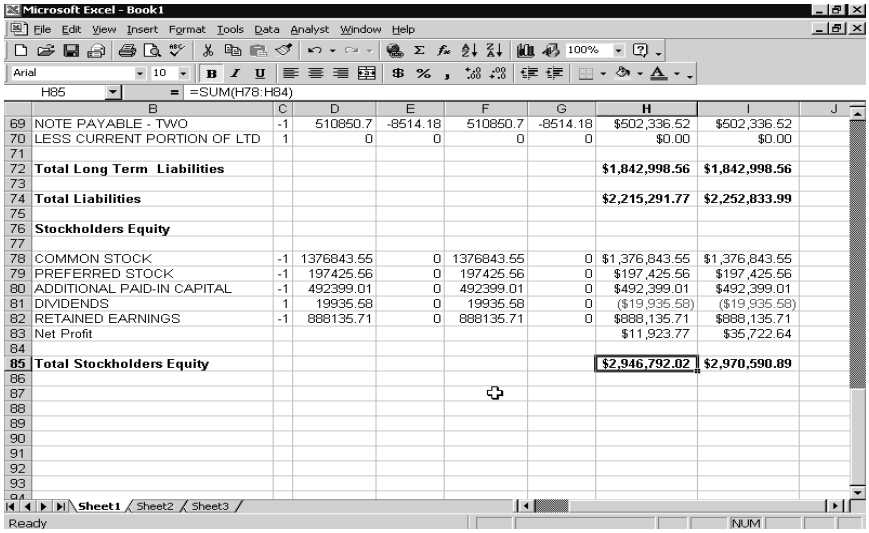
General Ledger Balance Sheet



	B	C	D	E	F	G	H	I	J
69	NOTE PAYABLE - TWO	-1	510850.7	-8514.18	510850.7	-8514.18	$502,336.52	$502,336.52	
70	LESS CURRENT PORTION OF LTD	1	0	0	0	0	$0.00	$0.00	
71									
72	**Total Long Term Liabilities**						**$1,842,998.56**	**$1,842,998.56**	
73									
74	**Total Liabilities**						**$2,215,291.77**	**$2,252,833.99**	
75									
76	**Stockholders Equity**								
77									
78	COMMON STOCK	-1	1376843.55	0	1376843.55	0	$1,376,843.55	$1,376,843.55	
79	PREFERRED STOCK	-1	197425.56	0	197425.56	0	$197,425.56	$197,425.56	
80	ADDITIONAL PAID-IN CAPITAL	-1	492399.01	0	492399.01	0	$492,399.01	$492,399.01	
81	DIVIDENDS	1	19935.58	0	19935.58	0	($19,935.58)	($19,935.58)	
82	RETAINED EARNINGS	-1	888135.71	0	888135.71	0	$888,135.71	$888,135.71	
83	Net Profit						$11,923.77	$35,722.64	

The Budget Net Profit amount should display on the Balance sheet.

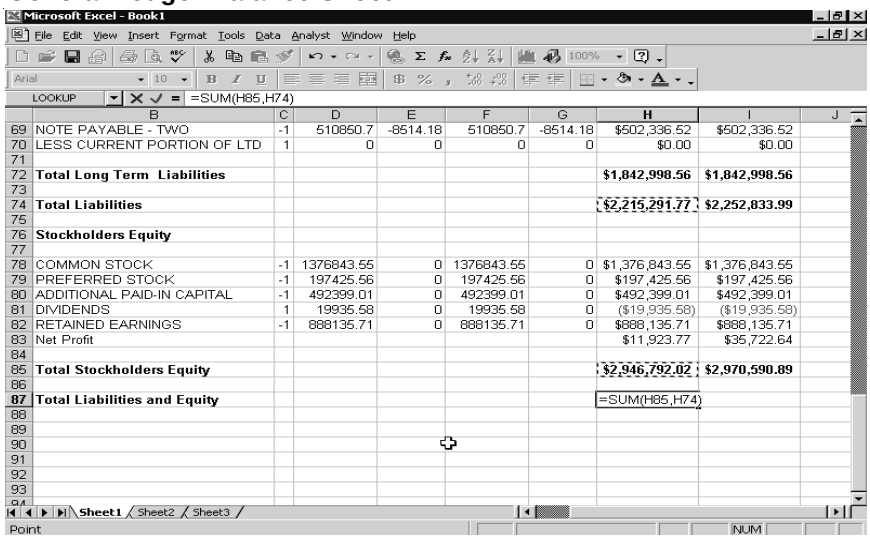
General Ledger Balance Sheet



	B	C	D	E	F	G	H	I	J
69	NOTE PAYABLE - TWO	-1	510850.7	-8514.18	510850.7	-8514.18	$502,336.52	$502,336.52	
70	LESS CURRENT PORTION OF LTD	1	0	0	0	0	$0.00	$0.00	
71									
72	**Total Long Term Liabilities**						**$1,842,998.56**	**$1,842,998.56**	
73									
74	**Total Liabilities**						**$2,215,291.77**	**$2,252,833.99**	
75									
76	**Stockholders Equity**								
77									
78	COMMON STOCK	-1	1376843.55	0	1376843.55	0	$1,376,843.55	$1,376,843.55	
79	PREFERRED STOCK	-1	197425.56	0	197425.56	0	$197,425.56	$197,425.56	
80	ADDITIONAL PAID-IN CAPITAL	-1	492399.01	0	492399.01	0	$492,399.01	$492,399.01	
81	DIVIDENDS	1	19935.58	0	19935.58	0	($19,935.58)	($19,935.58)	
82	RETAINED EARNINGS	-1	888135.71	0	888135.71	0	$888,135.71	$888,135.71	
83	Net Profit						$11,923.77	$35,722.64	
84									
85	**Total Stockholders Equity**						**$2,946,792.02**	**$2,970,590.89**	
86									
87									
88									
89									
90									
91									
92									
93									

Create a label and totals for the Current Year and Budget columns in the Stockholders Equity section.

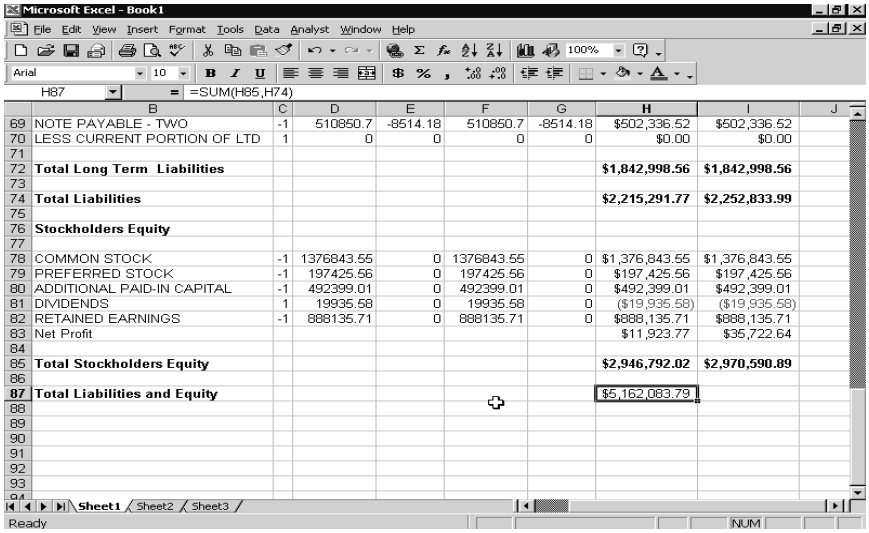
General Ledger Balance Sheet



	B	C	D	E	F	G	H	I	J
69	NOTE PAYABLE - TWO	-1	510850.7	-8514.18	510850.7	-8514.18	$502,336.52	$502,336.52	
70	LESS CURRENT PORTION OF LTD	1	0	0	0	0	$0.00	$0.00	
71									
72	**Total Long Term Liabilities**						**$1,842,998.56**	**$1,842,998.56**	
73									
74	**Total Liabilities**						**$2,215,291.77**	**$2,252,833.99**	
75									
76	**Stockholders Equity**								
77									
78	COMMON STOCK	-1	1376843.55	0	1376843.55	0	$1,376,843.55	$1,376,843.55	
79	PREFERRED STOCK	-1	197425.56	0	197425.56	0	$197,425.56	$197,425.56	
80	ADDITIONAL PAID-IN CAPITAL	-1	492399.01	0	492399.01	0	$492,399.01	$492,399.01	
81	DIVIDENDS	1	19935.58	0	19935.58	0	($19,935.58)	($19,935.58)	
82	RETAINED EARNINGS	-1	888135.71	0	888135.71	0	$888,135.71	$888,135.71	
83	Net Profit						$11,923.77	$35,722.64	
84									
85	**Total Stockholders Equity**						**$2,946,792.02**	**$2,970,590.89**	
86									
87	**Total Liabilities and Equity**						=SUM(H85,H74)		
88									
89									
90									
91									
92									
93									

Create a total for Current Year Liabilities and Equity by adding the Total Liability to the Total Stockholders Equity OR by adding the Total Current Liabilities, Total Long Term Liabilities and Total Stockholders Equity subtotals together.

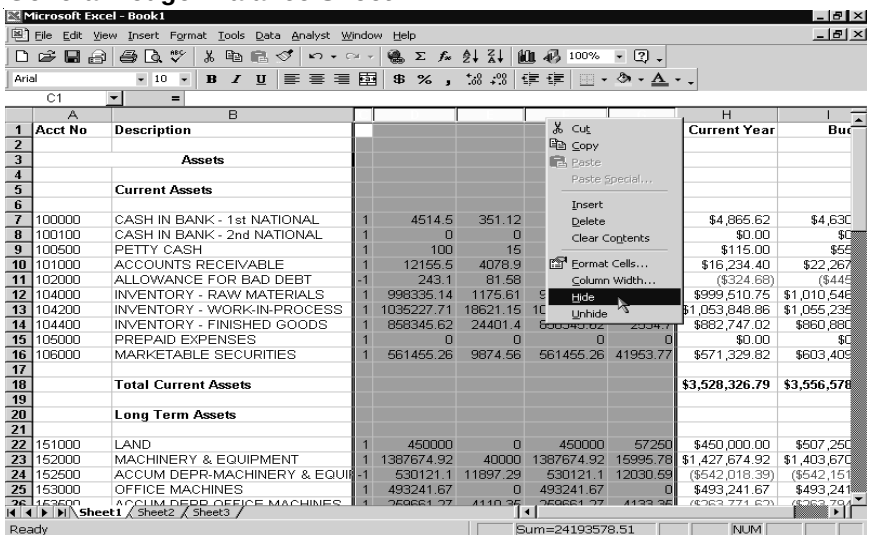
General Ledger Balance Sheet



	B	C	D	E	F	G	H	I	J
69	NOTE PAYABLE - TWO	-1	510850.7	-8514.18	510850.7	-8514.18	$502,336.52	$502,336.52	
70	LESS CURRENT PORTION OF LTD	1	0	0	0	0	$0.00	$0.00	
71									
72	**Total Long Term Liabilities**						**$1,842,998.56**	**$1,842,998.56**	
73									
74	**Total Liabilities**						**$2,215,291.77**	**$2,252,833.99**	
75									
76	**Stockholders Equity**								
77									
78	COMMON STOCK	-1	1376843.55	0	1376843.55	0	$1,376,843.55	$1,376,843.55	
79	PREFERRED STOCK	-1	197425.56	0	197425.56	0	$197,425.56	$197,425.56	
80	ADDITIONAL PAID-IN CAPITAL	-1	492399.01	0	492399.01	0	$492,399.01	$492,399.01	
81	DIVIDENDS	1	19935.58	0	19935.58	0	($19,935.58)	($19,935.58)	
82	RETAINED EARNINGS	-1	888135.71	0	888135.71	0	$888,135.71	$888,135.71	
83	Net Profit						$11,923.77	$35,722.64	
84									
85	**Total Stockholders Equity**						**$2,946,792.02**	**$2,970,590.89**	
86									
87	**Total Liabilities and Equity**						$5,162,083.79		
88									
89									
90									
91									
92									
93									

Repeat the steps for the Budget Column and format the cells to match the other totals.

General Ledger Balance Sheet

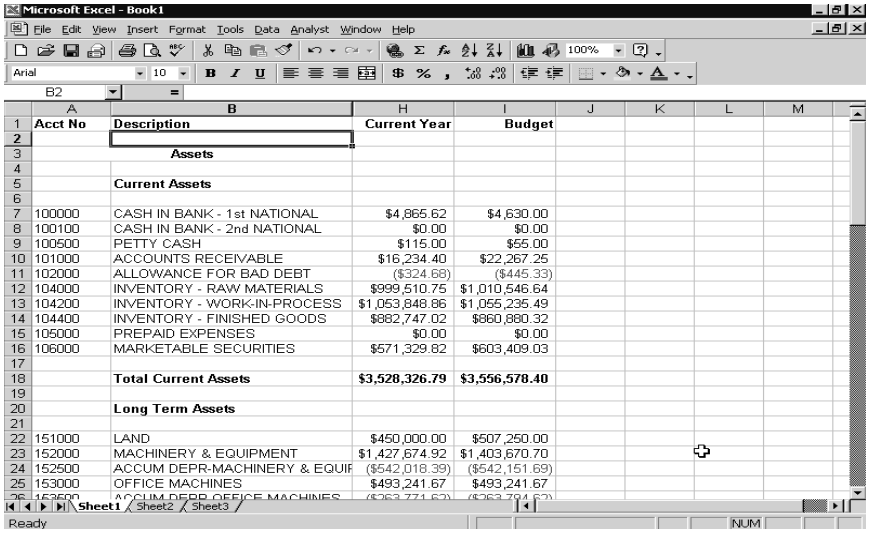


	A	B					H	I
1	**Acct No**	**Description**					**Current Year**	**Buc**
2								
3		**Assets**						
4								
5		**Current Assets**						
6								
7	100000	CASH IN BANK - 1st NATIONAL	1	4514.5	351.12		$4,865.62	$4,63
8	100100	CASH IN BANK - 2nd NATIONAL	1	0	0		$0.00	$
9	100500	PETTY CASH	1	100	15		$115.00	$5
10	101000	ACCOUNTS RECEIVABLE	1	12155.5	4078.9		$16,234.40	$22,267
11	102000	ALLOWANCE FOR BAD DEBT	-1	243.1	81.58		($324.68)	($44
12	104000	INVENTORY - RAW MATERIALS	1	998335.14	1175.61		$999,510.75	$1,010,54
13	104200	INVENTORY - WORK-IN-PROCESS	1	1035227.71	18621.15		$1,053,848.86	$1,055,23
14	104400	INVENTORY - FINISHED GOODS	1	858345.62	24401.4		$882,747.02	$860,88
15	105000	PREPAID EXPENSES	1	0	0	0	$0.00	$
16	106000	MARKETABLE SECURITIES	1	561455.26	9874.56	561455.26	41953.77	$571,329.82	$603,40
17								
18		**Total Current Assets**					**$3,528,326.79**	**$3,556,57**
19								
20		**Long Term Assets**						
21								
22	151000	LAND	1	450000	0	450000	57250	$450,000.00	$507,25
23	152000	MACHINERY & EQUIPMENT	1	1387674.92	40000	1387674.92	15995.78	$1,427,674.92	$1,403,67
24	152500	ACCUM DEPR-MACHINERY & EQUI	-1	530121.1	11897.29	530121.1	12030.59	($542,018.39)	($542,15
25	153000	OFFICE MACHINES	1	493241.67	0	493241.67	0	$493,241.67	$493,24
26	153500	ACCUM DEPR-OFFICE MACHINES	1	269661.27	4110.36	269661.27	4133.35	($263,771.62)	($269,79

Click and highlight columns C through G.

Right click and select Hide or select Window from the menu followed by Hide.

General Ledger Balance Sheet

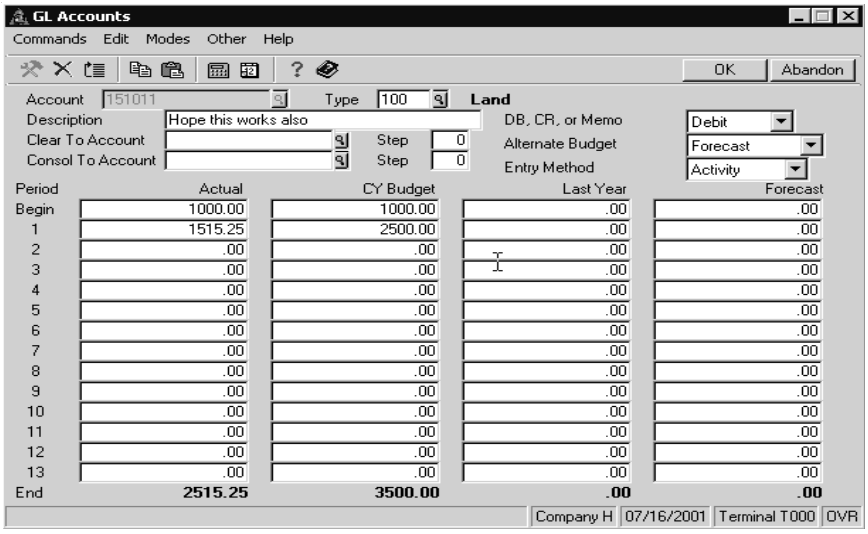


	A	B	H	I	J	K	L	M
1	**Acct No**	**Description**	**Current Year**	**Budget**				
2								
3		**Assets**						
4								
5		**Current Assets**						
6								
7	100000	CASH IN BANK - 1st NATIONAL	$4,865.62	$4,630.00				
8	100100	CASH IN BANK - 2nd NATIONAL	$0.00	$0.00				
9	100500	PETTY CASH	$115.00	$55.00				
10	101000	ACCOUNTS RECEIVABLE	$16,234.40	$22,267.25				
11	102000	ALLOWANCE FOR BAD DEBT	($324.68)	($445.33)				
12	104000	INVENTORY - RAW MATERIALS	$999,510.75	$1,010,546.64				
13	104200	INVENTORY - WORK-IN-PROCESS	$1,053,848.86	$1,055,235.49				
14	104400	INVENTORY - FINISHED GOODS	$882,747.02	$860,880.32				
15	105000	PREPAID EXPENSES	$0.00	$0.00				
16	106000	MARKETABLE SECURITIES	$571,329.82	$603,409.03				
17								
18		**Total Current Assets**	**$3,528,326.79**	**$3,556,578.40**				
19								
20		**Long Term Assets**						
21								
22	151000	LAND	$450,000.00	$507,250.00				
23	152000	MACHINERY & EQUIPMENT	$1,427,674.92	$1,403,670.70				
24	152500	ACCUM DEPR-MACHINERY & EQUIP	($542,018.39)	($542,151.69)				
25	153000	OFFICE MACHINES	$493,241.67	$493,241.67				

Only the Acct No, Description, Current Year, and Budget columns should display.

The next step is to test the Refresh option by adding a few accounts in OSAS GL to verify the subtotals and rows are updated correctly.

GL Accounts

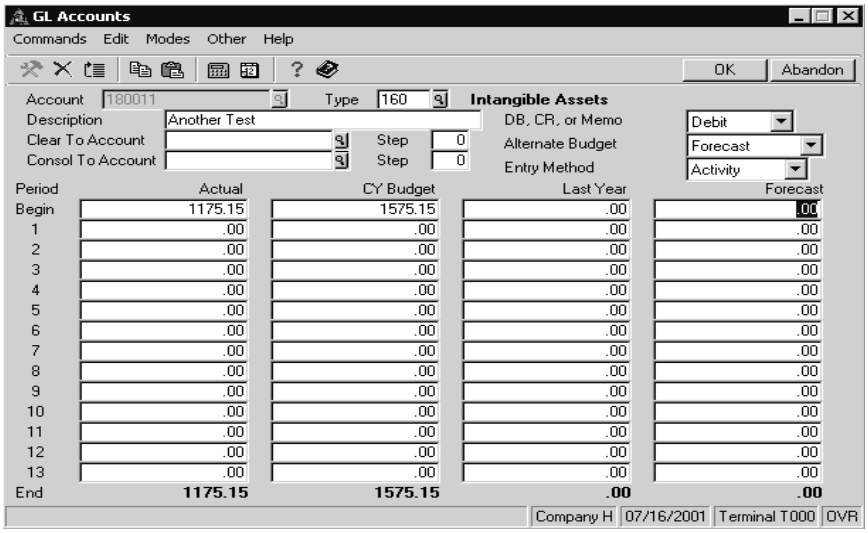


Period	Actual	CY Budget	Last Year	Forecast
Begin	1000.00	1000.00	.00	.00
1	1515.25	2500.00	.00	.00
2	.00	.00	.00	.00
3	.00	.00	.00	.00
4	.00	.00	.00	.00
5	.00	.00	.00	.00
6	.00	.00	.00	.00
7	.00	.00	.00	.00
8	.00	.00	.00	.00
9	.00	.00	.00	.00
10	.00	.00	.00	.00
11	.00	.00	.00	.00
12	.00	.00	.00	.00
13	.00	.00	.00	.00
End	**2515.25**	**3500.00**	**.00**	**.00**

We already added an account to the 100000-109999 range.

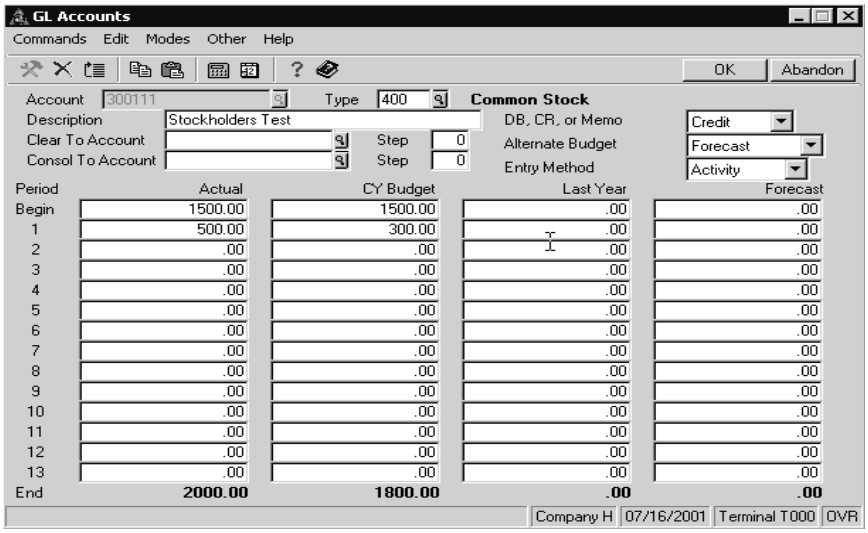
Add an account to the 150000-159999 range.

GL Accounts



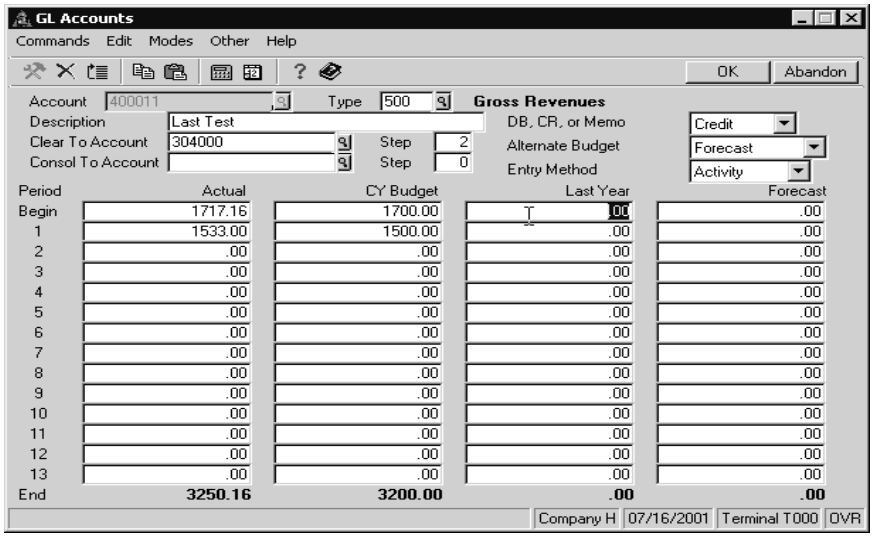
Add an account to the 180000-189999 range.

GL Accounts



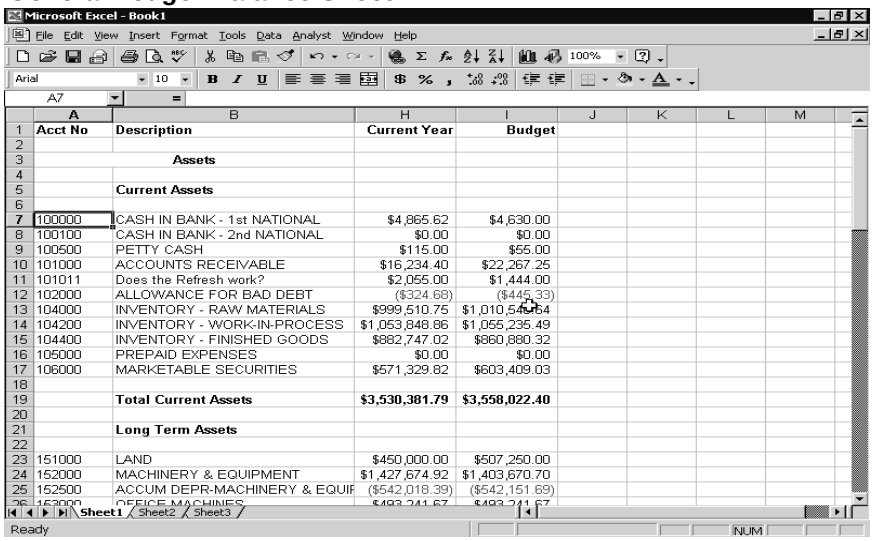
Add an account to the 3000000-399999 range.

GL Accounts



Add an account to the 400000-999700 range, which is on Sheet2 in the workbook

General Ledger Balance Sheet



Go back to the Balance sheet in Excel select an OSAS field in the Current Assets section and Refresh the Data.

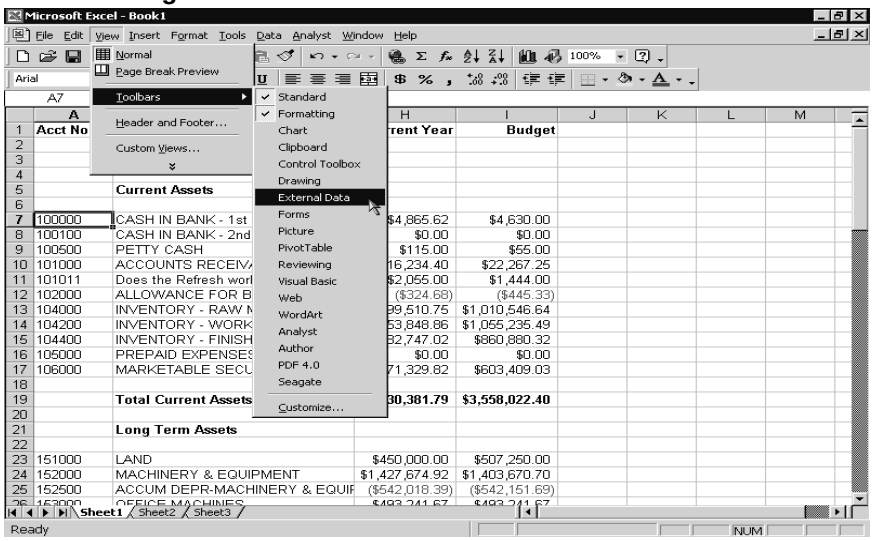
The account added to the Current Assets range is added to the sheet and the totals are updated accordingly, but the accounts added to the other ranges are not added to the sheet. The Net Profit amount on Sheet2 is not update as well.

The Refresh Data option only refreshes data in the selected query.

This balance sheet has a total of 7 queries including the Net Profit query on Sheet2.

To refresh each query we could select each one and use the Refresh Data option, but that can be time consuming.

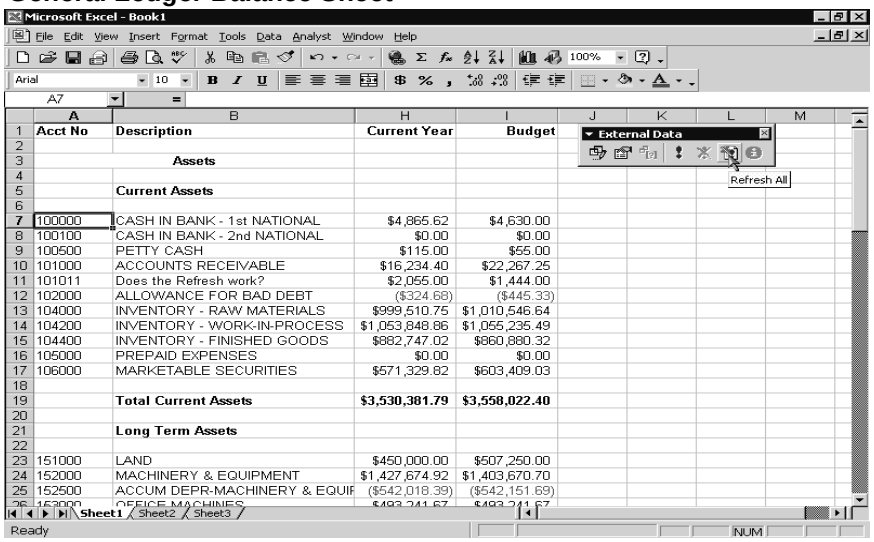
General Ledger Balance Sheet



To refresh several queries at one time in Excel use the Refresh All option on the External Data Source Toolbar.

From the View menu, select Toolbars followed by External.

General Ledger Balance Sheet

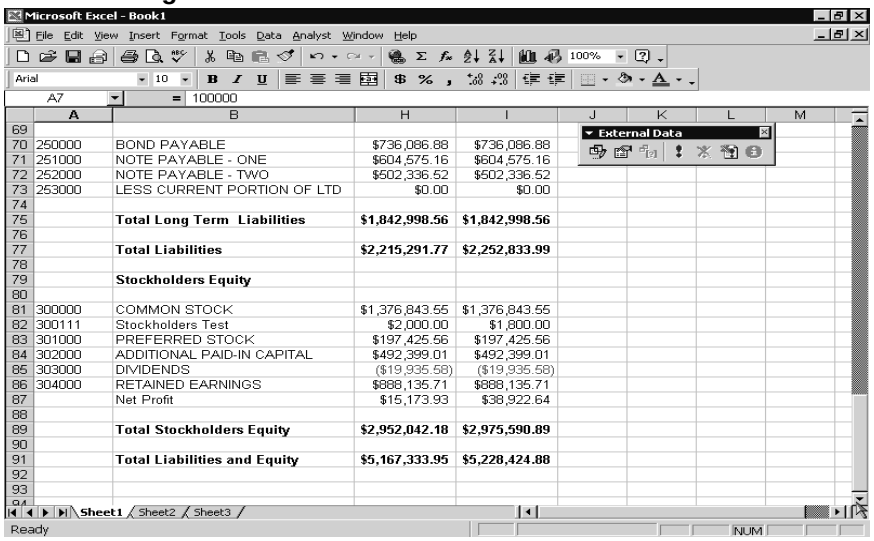


Acct No	Description	Current Year	Budget
	Assets		
	Current Assets		
100000	CASH IN BANK - 1st NATIONAL	$4,865.62	$4,630.00
100100	CASH IN BANK - 2nd NATIONAL	$0.00	$0.00
100500	PETTY CASH	$115.00	$55.00
101000	ACCOUNTS RECEIVABLE	$16,234.40	$22,267.25
101011	Does the Refresh work?	$2,055.00	$1,444.00
102000	ALLOWANCE FOR BAD DEBT	($324.68)	($445.33)
104000	INVENTORY - RAW MATERIALS	$999,510.75	$1,010,546.64
104200	INVENTORY - WORK-IN-PROCESS	$1,053,848.86	$1,055,235.49
104400	INVENTORY - FINISHED GOODS	$882,747.02	$860,880.32
105000	PREPAID EXPENSES	$0.00	$0.00
106000	MARKETABLE SECURITIES	$571,329.82	$603,409.03
	Total Current Assets	**$3,530,381.79**	**$3,558,022.40**
	Long Term Assets		
151000	LAND	$450,000.00	$507,250.00
152000	MACHINERY & EQUIPMENT	$1,427,674.92	$1,403,670.70
152500	ACCUM DEPR-MACHINERY & EQUIP	($542,018.39)	($542,151.69)

The External Data Source tool bar is displayed.

Make sure the cursor is in a field brought in with a query and select Refresh All from the tool bar.

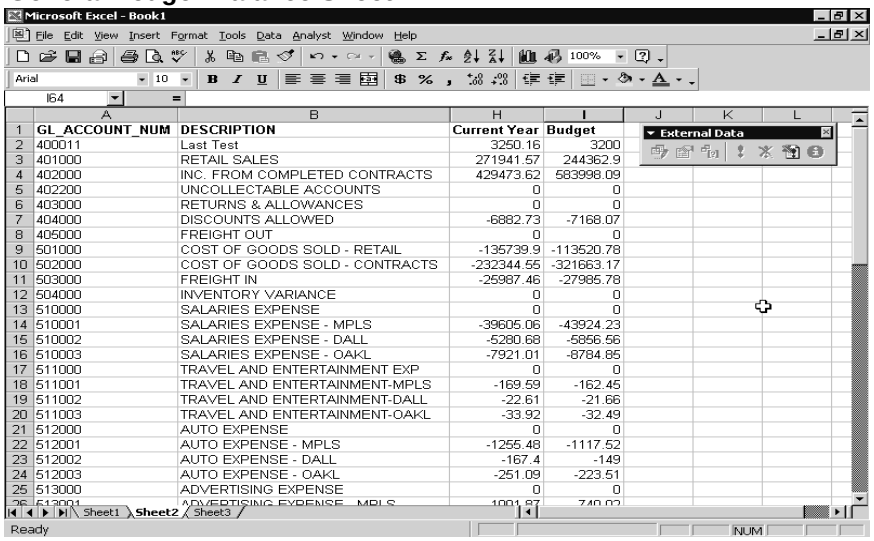
General Ledger Balance Sheet



	A	B	H	I
69				
70	250000	BOND PAYABLE	$736,086.88	$736,086.88
71	251000	NOTE PAYABLE - ONE	$604,575.16	$604,575.16
72	252000	NOTE PAYABLE - TWO	$502,336.52	$502,336.52
73	253000	LESS CURRENT PORTION OF LTD	$0.00	$0.00
74				
75		**Total Long Term Liabilities**	**$1,842,998.56**	**$1,842,998.56**
76				
77		**Total Liabilities**	**$2,215,291.77**	**$2,252,833.99**
78				
79		**Stockholders Equity**		
80				
81	300000	COMMON STOCK	$1,376,843.55	$1,376,843.55
82	300111	Stockholders Test	$2,000.00	$1,800.00
83	301000	PREFERRED STOCK	$197,425.56	$197,425.56
84	302000	ADDITIONAL PAID-IN CAPITAL	$492,399.01	$492,399.01
85	303000	DIVIDENDS	($19,935.58)	($19,935.58)
86	304000	RETAINED EARNINGS	$888,135.71	$888,135.71
87		Net Profit	$15,173.93	$38,922.64
88				
89		**Total Stockholders Equity**	**$2,952,042.18**	**$2,975,590.89**
90				
91		**Total Liabilities and Equity**	**$5,167,333.95**	**$5,228,424.88**
92				
93				

All queries in the workbook are refreshed at one time.

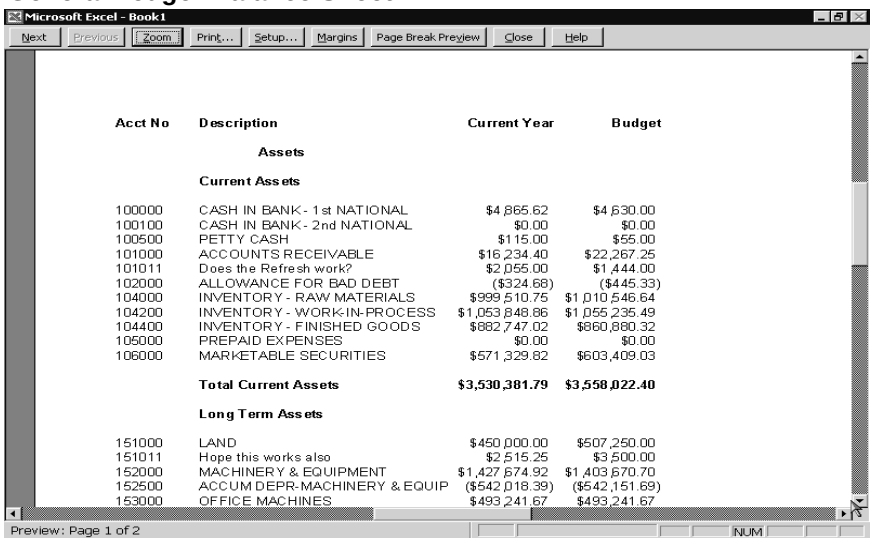
General Ledger Balance Sheet



	A	B	H	I
1	**GL_ACCOUNT_NUM**	**DESCRIPTION**	**Current Year**	**Budget**
2	400011	Last Test	3250.16	3200
3	401000	RETAIL SALES	271941.57	244362.9
4	402000	INC. FROM COMPLETED CONTRACTS	429473.62	583998.09
5	402200	UNCOLLECTABLE ACCOUNTS	0	0
6	403000	RETURNS & ALLOWANCES	0	0
7	404000	DISCOUNTS ALLOWED	-6882.73	-7168.07
8	405000	FREIGHT OUT	0	0
9	501000	COST OF GOODS SOLD - RETAIL	-135739.9	-113520.78
10	502000	COST OF GOODS SOLD - CONTRACTS	-232344.55	-321663.17
11	503000	FREIGHT IN	-25987.46	-27985.78
12	504000	INVENTORY VARIANCE	0	0
13	510000	SALARIES EXPENSE	0	0
14	510001	SALARIES EXPENSE - MPLS	-39605.06	-43924.23
15	510002	SALARIES EXPENSE - DALL	-5280.68	-5856.56
16	510003	SALARIES EXPENSE - OAKL	-7921.01	-8784.85
17	511000	TRAVEL AND ENTERTAINMENT EXP	0	0
18	511001	TRAVEL AND ENTERTAINMENT-MPLS	-169.59	-162.45
19	511002	TRAVEL AND ENTERTAINMENT-DALL	-22.61	-21.66
20	511003	TRAVEL AND ENTERTAINMENT-OAKL	-33.92	-32.49
21	512000	AUTO EXPENSE	0	0
22	512001	AUTO EXPENSE - MPLS	-1255.48	-1117.52
23	512002	AUTO EXPENSE - DALL	-167.4	-149
24	512003	AUTO EXPENSE - OAKL	-251.09	-223.51
25	513000	ADVERTISING EXPENSE	0	0
26	513001	ADVERTISING EXPENSE - MPLS	-1001.87	-740.02

The last step is to print the Balance Sheet.

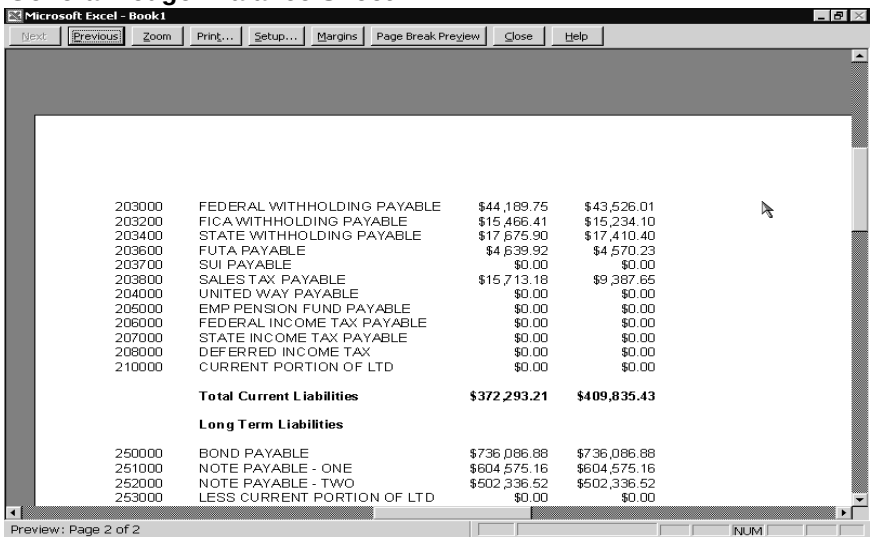
General Ledger Balance Sheet



Acct No	Description	Current Year	Budget
	Assets		
	Current Assets		
100000	CASH IN BANK - 1st NATIONAL	$4,865.62	$4,630.00
100100	CASH IN BANK - 2nd NATIONAL	$0.00	$0.00
100500	PETTY CASH	$115.00	$55.00
101000	ACCOUNTS RECEIVABLE	$16,234.40	$22,267.25
101011	Does the Refresh work?	$2,055.00	$1,444.00
102000	ALLOWANCE FOR BAD DEBT	($324.68)	($445.33)
104000	INVENTORY - RAW MATERIALS	$999,510.75	$1,010,546.64
104200	INVENTORY - WORK-IN-PROCESS	$1,053,848.86	$1,055,235.49
104400	INVENTORY - FINISHED GOODS	$882,747.02	$860,880.32
105000	PREPAID EXPENSES	$0.00	$0.00
106000	MARKETABLE SECURITIES	$571,329.82	$603,409.03
	Total Current Assets	**$3,530,381.79**	**$3,558,022.40**
	Long Term Assets		
151000	LAND	$450,000.00	$507,250.00
151011	Hope this works also	$2,515.25	$3,500.00
152000	MACHINERY & EQUIPMENT	$1,427,674.92	$1,403,670.70
152500	ACCUM DEPR-MACHINERY & EQUIP	($542,018.39)	($542,151.69)
153000	OFFICE MACHINES	$493,241.67	$493,241.67

Select Print Preview from the File menu.

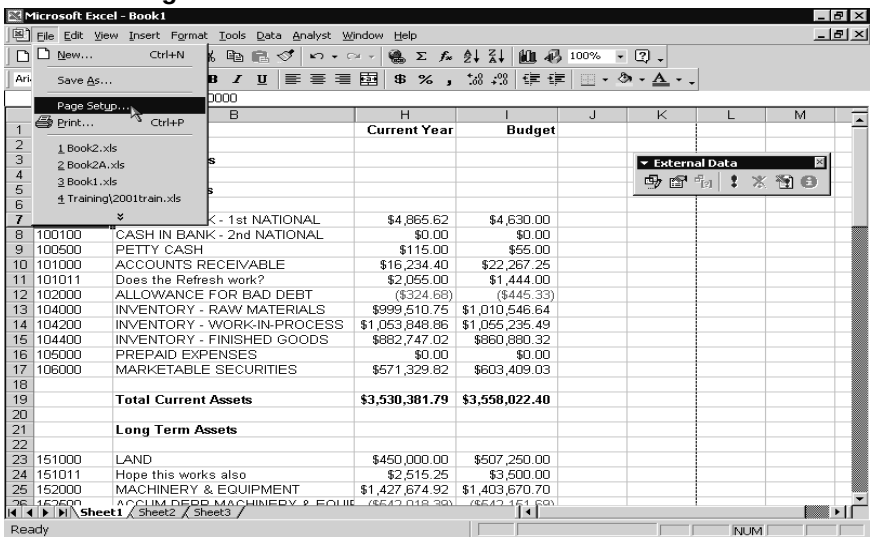
General Ledger Balance Sheet



203000	FEDERAL WITHHOLDING PAYABLE	$44,189.75	$43,526.01
203200	FICA WITHHOLDING PAYABLE	$15,466.41	$15,234.10
203400	STATE WITHHOLDING PAYABLE	$17,675.90	$17,410.40
203600	FUTA PAYABLE	$4,639.92	$4,570.23
203700	SUI PAYABLE	$0.00	$0.00
203800	SALES TAX PAYABLE	$15,713.18	$9,387.65
204000	UNITED WAY PAYABLE	$0.00	$0.00
205000	EMP PENSION FUND PAYABLE	$0.00	$0.00
206000	FEDERAL INCOME TAX PAYABLE	$0.00	$0.00
207000	STATE INCOME TAX PAYABLE	$0.00	$0.00
208000	DEFERRED INCOME TAX	$0.00	$0.00
210000	CURRENT PORTION OF LTD	$0.00	$0.00
	Total Current Liabilities	**$372,293.21**	**$409,835.43**
	Long Term Liabilities		
250000	BOND PAYABLE	$736,086.88	$736,086.88
251000	NOTE PAYABLE - ONE	$604,575.16	$604,575.16
252000	NOTE PAYABLE - TWO	$502,336.52	$502,336.52
253000	LESS CURRENT PORTION OF LTD	$0.00	$0.00

The second page does not have the column headings displayed and the page break is not after the Total Assets row, so the Current Liabilities are split on two pages.

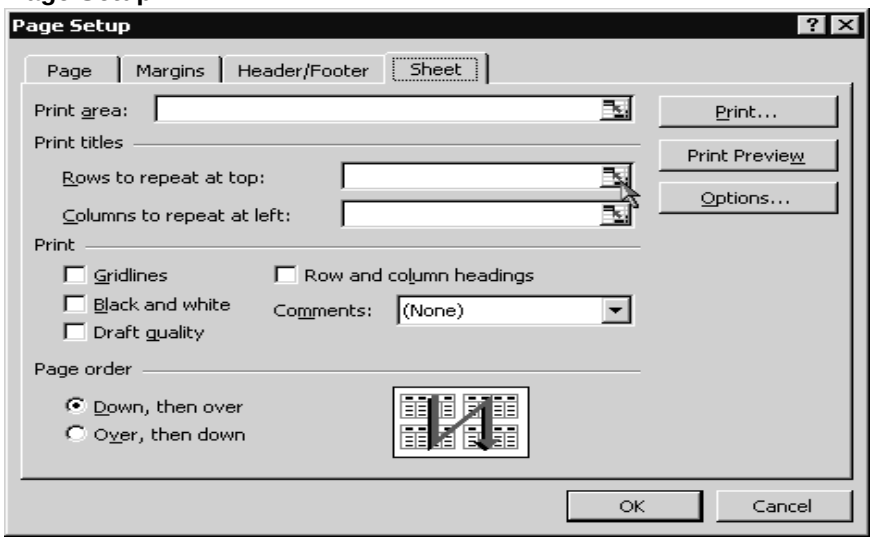
General Ledger Balance Sheet



		B	H	I	J	K	L	M
1			Current Year	Budget				
2								
3								
4								
5								
6								
7								
8	100100	CASH IN BANK - 2nd NATIONAL	$0.00	$0.00				
9	100500	PETTY CASH	$115.00	$55.00				
10	101000	ACCOUNTS RECEIVABLE	$16,234.40	$22,267.25				
11	101011	Does the Refresh work?	$2,055.00	$1,444.00				
12	102000	ALLOWANCE FOR BAD DEBT	($324.68)	($445.33)				
13	104000	INVENTORY - RAW MATERIALS	$999,510.75	$1,010,546.64				
14	104200	INVENTORY - WORK-IN-PROCESS	$1,053,848.86	$1,055,235.49				
15	104400	INVENTORY - FINISHED GOODS	$882,747.02	$860,880.32				
16	105000	PREPAID EXPENSES	$0.00	$0.00				
17	106000	MARKETABLE SECURITIES	$571,329.82	$603,409.03				
18								
19		**Total Current Assets**	**$3,530,381.79**	**$3,558,022.40**				
20								
21		**Long Term Assets**						
22								
23	151000	LAND	$450,000.00	$507,250.00				
24	151011	Hope this works also	$2,515.25	$3,500.00				
25	152000	MACHINERY & EQUIPMENT	$1,427,674.92	$1,403,670.70				

To make the column headings print on all pages, from the File menu select Page Setup.

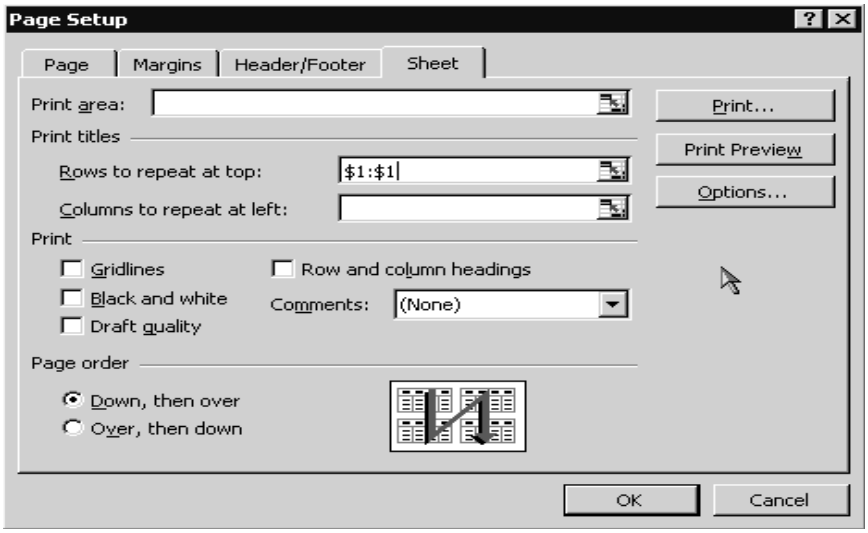
Page Setup



Click the Sheet tab.

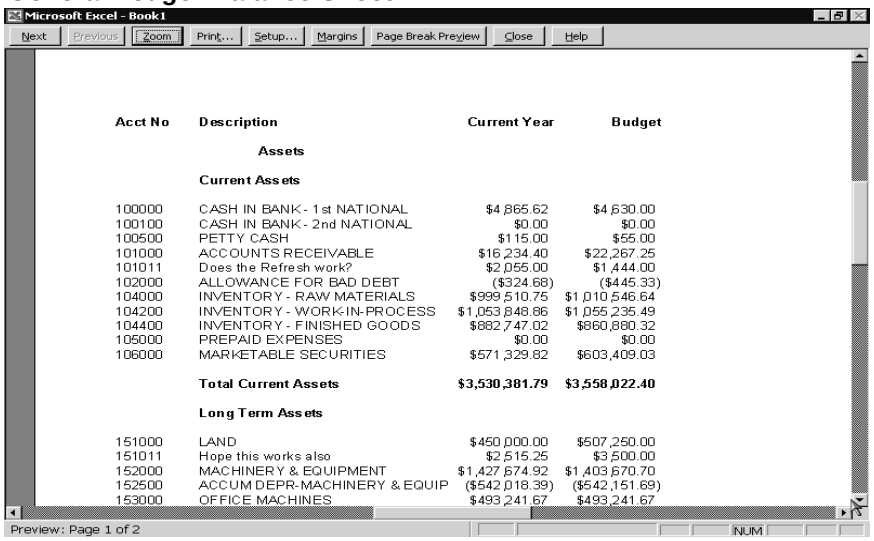
In the Rows to repeat at top field enter row 1 or click the graphic button at the end of the field.

Page Setup



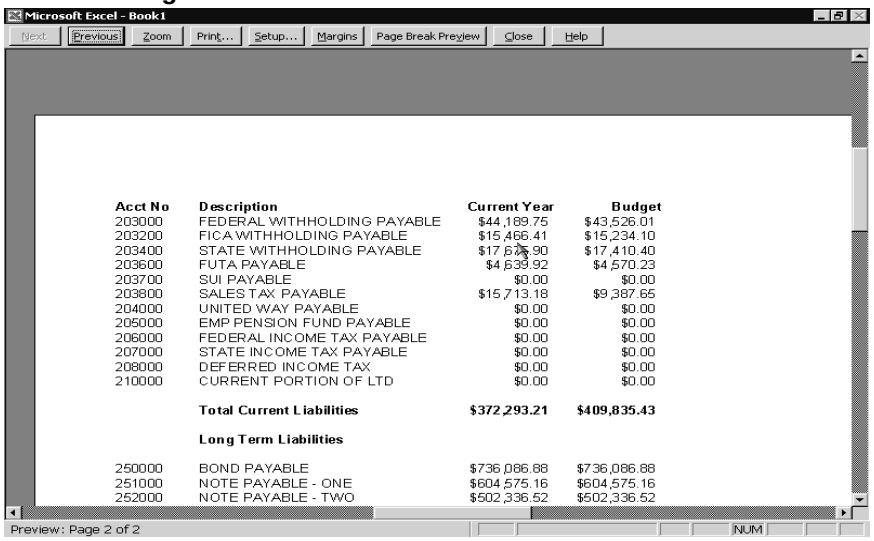
Click the row you want to repeat and Excel will fill in the field for you.

General Ledger Balance Sheet



Acct No	Description	Current Year	Budget
	Assets		
	Current Assets		
100000	CASH IN BANK - 1st NATIONAL	$4,865.62	$4,630.00
100100	CASH IN BANK - 2nd NATIONAL	$0.00	$0.00
100500	PETTY CASH	$115.00	$55.00
101000	ACCOUNTS RECEIVABLE	$16,234.40	$22,267.25
101011	Does the Refresh work?	$2,055.00	$1,444.00
102000	ALLOWANCE FOR BAD DEBT	($324.68)	($445.33)
104000	INVENTORY - RAW MATERIALS	$999,510.75	$1,010,546.64
104200	INVENTORY - WORK-IN-PROCESS	$1,053,848.86	$1,055,235.49
104400	INVENTORY - FINISHED GOODS	$882,747.02	$860,880.32
105000	PREPAID EXPENSES	$0.00	$0.00
106000	MARKETABLE SECURITIES	$571,329.82	$603,409.03
	Total Current Assets	**$3,530,381.79**	**$3,558,022.40**
	Long Term Assets		
151000	LAND	$450,000.00	$507,250.00
151011	Hope this works also	$2,515.25	$3,500.00
152000	MACHINERY & EQUIPMENT	$1,427,674.92	$1,403,670.70
152500	ACCUM DEPR-MACHINERY & EQUIP	($542,018.39)	($542,151.69)
153000	OFFICE MACHINES	$493,241.67	$493,241.67

General Ledger Balance Sheet

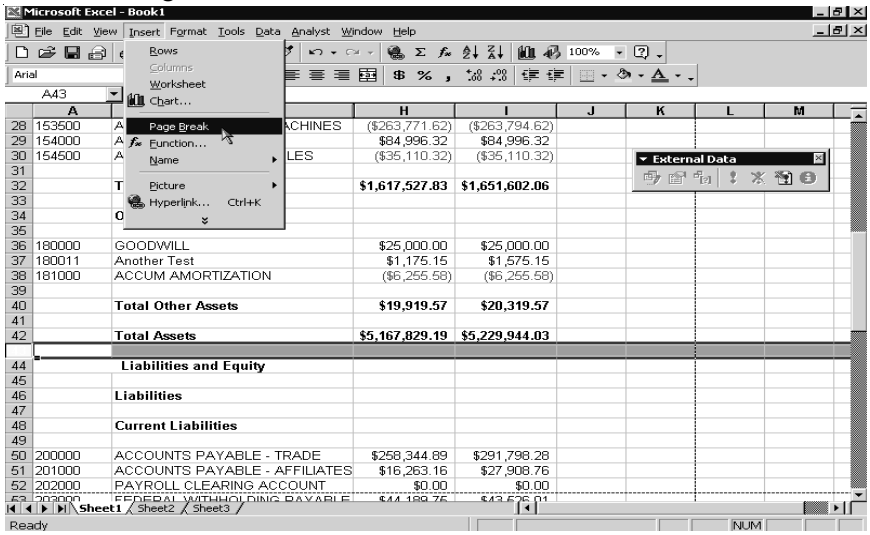


Acct No	Description	Current Year	Budget
203000	FEDERAL WITHHOLDING PAYABLE	$44,189.75	$43,526.01
203200	FICA WITHHOLDING PAYABLE	$15,466.41	$15,234.10
203400	STATE WITHHOLDING PAYABLE	$17,633.90	$17,410.40
203600	FUTA PAYABLE	$4,639.92	$4,570.23
203700	SUI PAYABLE	$0.00	$0.00
203800	SALES TAX PAYABLE	$15,713.18	$9,387.65
204000	UNITED WAY PAYABLE	$0.00	$0.00
205000	EMP PENSION FUND PAYABLE	$0.00	$0.00
206000	FEDERAL INCOME TAX PAYABLE	$0.00	$0.00
207000	STATE INCOME TAX PAYABLE	$0.00	$0.00
208000	DEFERRED INCOME TAX	$0.00	$0.00
210000	CURRENT PORTION OF LTD	$0.00	$0.00
	Total Current Liabilities	**$372,293.21**	**$409,835.43**
	Long Term Liabilities		
250000	BOND PAYABLE	$736,086.88	$736,086.88
251000	NOTE PAYABLE - ONE	$604,575.16	$604,575.16
252000	NOTE PAYABLE - TWO	$502,336.52	$502,336.52

The column headings now print on all pages.

Next, edit the sheet to print Assets on one page and Liabilities on the next page.

General Ledger Balance Sheet

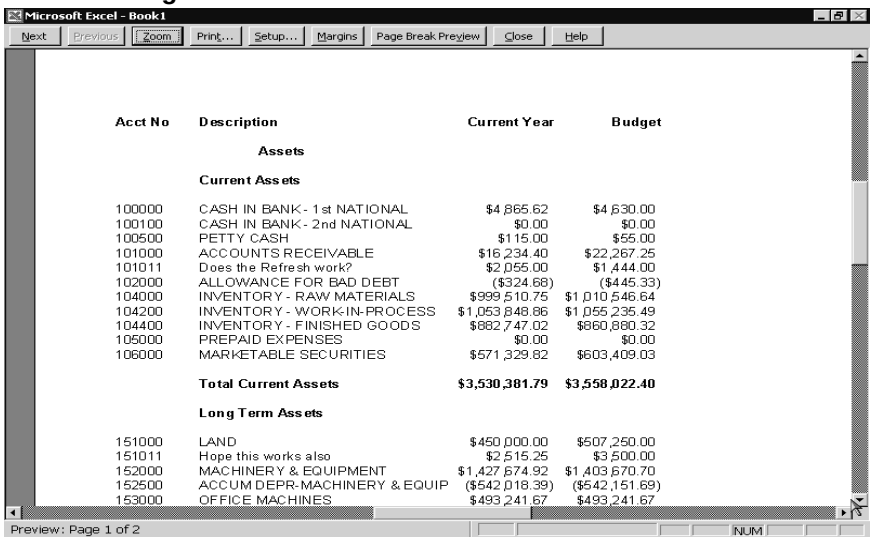


28	153500	A	($263,771.62)	($263,794.62)
29	154000	A	$84,996.32	$84,996.32
30	154500	A	($35,110.32)	($35,110.32)
31				
32		**T**	**$1,617,527.83**	**$1,651,602.06**
33				
34		**O**		
35				
36	180000	GOODWILL	$25,000.00	$25,000.00
37	180011	Another Test	$1,175.15	$1,575.15
38	181000	ACCUM AMORTIZATION	($6,255.58)	($6,255.58)
39				
40		**Total Other Assets**	**$19,919.57**	**$20,319.57**
41				
42		**Total Assets**	**$5,167,829.19**	**$5,229,944.03**
44		**Liabilities and Equity**		
45				
46		**Liabilities**		
47				
48		**Current Liabilities**		
49				
50	200000	ACCOUNTS PAYABLE - TRADE	$258,344.89	$291,798.28
51	201000	ACCOUNTS PAYABLE - AFFILIATES	$16,263.16	$27,908.76
52	202000	PAYROLL CLEARING ACCOUNT	$0.00	$0.00
53	203000	FEDERAL WITHHOLDING PAYABLE	$44,189.75	$43,526.01

Select the row below Total Assets.

From the Insert menu, select Page Break

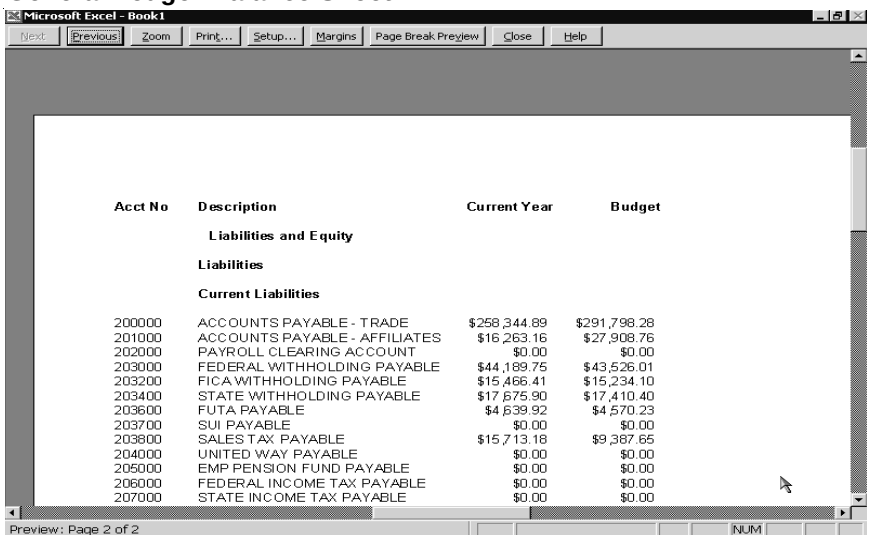
General Ledger Balance Sheet



Acct No	Description	Current Year	Budget
	Assets		
	Current Assets		
100000	CASH IN BANK - 1st NATIONAL	$4,865.62	$4,630.00
100100	CASH IN BANK - 2nd NATIONAL	$0.00	$0.00
100500	PETTY CASH	$115.00	$55.00
101000	ACCOUNTS RECEIVABLE	$16,234.40	$22,267.25
101011	Does the Refresh work?	$2,055.00	$1,444.00
102000	ALLOWANCE FOR BAD DEBT	($324.68)	($445.33)
104000	INVENTORY - RAW MATERIALS	$999,510.75	$1,010,546.64
104200	INVENTORY - WORK-IN-PROCESS	$1,053,848.86	$1,055,235.49
104400	INVENTORY - FINISHED GOODS	$882,747.02	$860,880.32
105000	PREPAID EXPENSES	$0.00	$0.00
106000	MARKETABLE SECURITIES	$571,329.82	$603,409.03
	Total Current Assets	**$3,530,381.79**	**$3,558,022.40**
	Long Term Assets		
151000	LAND	$450,000.00	$507,250.00
151011	Hope this works also	$2,515.25	$3,500.00
152000	MACHINERY & EQUIPMENT	$1,427,674.92	$1,403,670.70
152500	ACCUM DEPR-MACHINERY & EQUIP	($542,018.39)	($542,151.69)
153000	OFFICE MACHINES	$493,241.67	$493,241.67

Now the Assets print on page 1 and the Liabilities print on page 2.

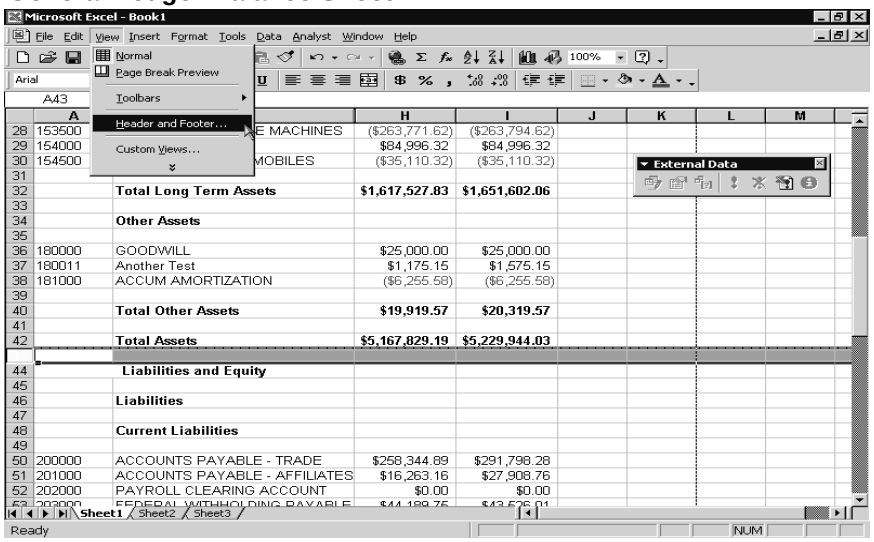
General Ledger Balance Sheet



Acct No	Description	Current Year	Budget
	Liabilities and Equity		
	Liabilities		
	Current Liabilities		
200000	ACCOUNTS PAYABLE - TRADE	$258,344.89	$291,798.28
201000	ACCOUNTS PAYABLE - AFFILIATES	$16,263.16	$27,908.76
202000	PAYROLL CLEARING ACCOUNT	$0.00	$0.00
203000	FEDERAL WITHHOLDING PAYABLE	$44,189.75	$43,526.01
203200	FICA WITHHOLDING PAYABLE	$15,466.41	$15,234.10
203400	STATE WITHHOLDING PAYABLE	$17,675.90	$17,410.40
203600	FUTA PAYABLE	$4,639.92	$4,570.23
203700	SUI PAYABLE	$0.00	$0.00
203800	SALES TAX PAYABLE	$15,713.18	$9,387.65
204000	UNITED WAY PAYABLE	$0.00	$0.00
205000	EMP PENSION FUND PAYABLE	$0.00	$0.00
206000	FEDERAL INCOME TAX PAYABLE	$0.00	$0.00
207000	STATE INCOME TAX PAYABLE	$0.00	$0.00

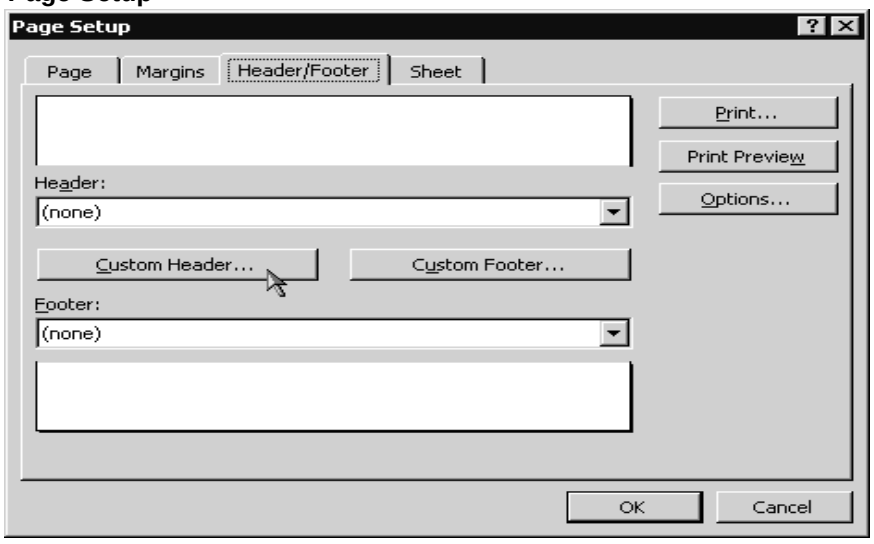
The last step for this spreadsheet is to create a Header for all the pages.

General Ledger Balance Sheet



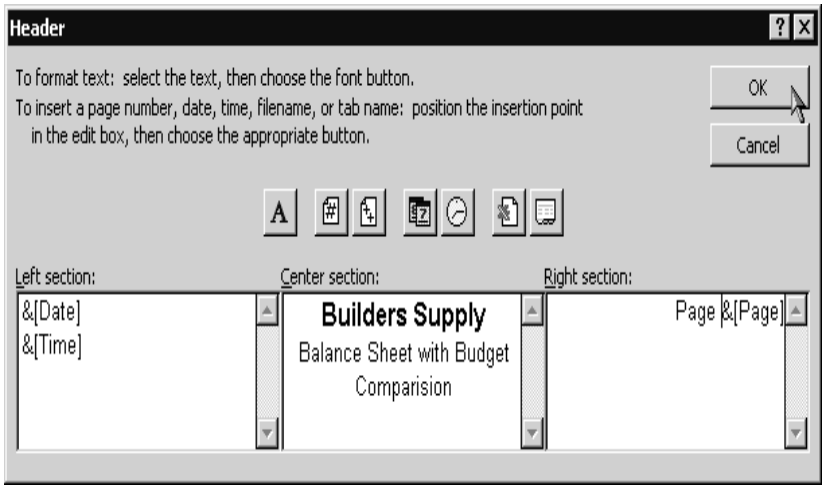
From the View menu select Header and Footer or from the File menu select Page Setup and select the Header/Footer tab.

Page Setup



To create a header, click the Customer Header button.

Custom Header

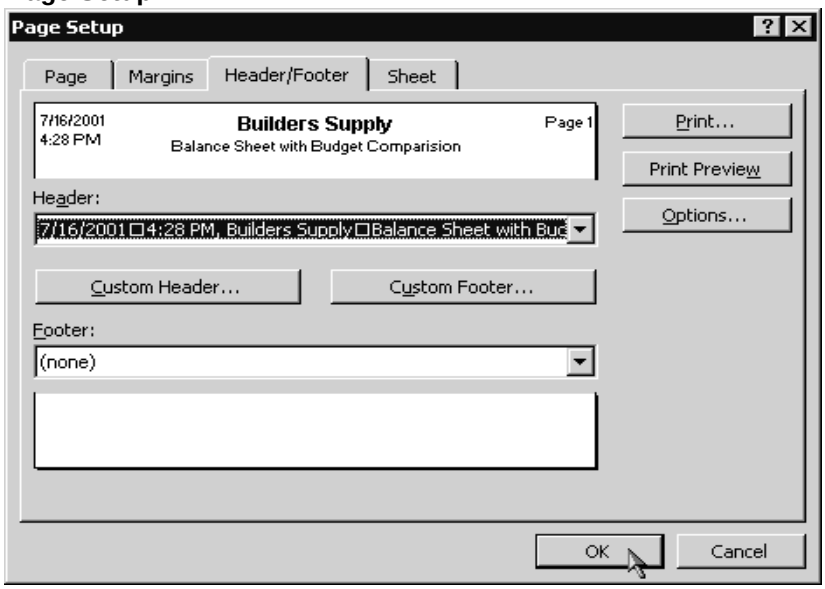


Enter the header information you want. You can enter information in the Left, Center and Right Sections and use some of the predefined headers from Excel.

For this sheet, click the Date and Time fields for the Left section. In the Center section enter Builders Supply on one line and Balance Sheet with Budget Comparison on the next line. In the Right section, enter Page and click the Page Number field.

Click OK to save the header.

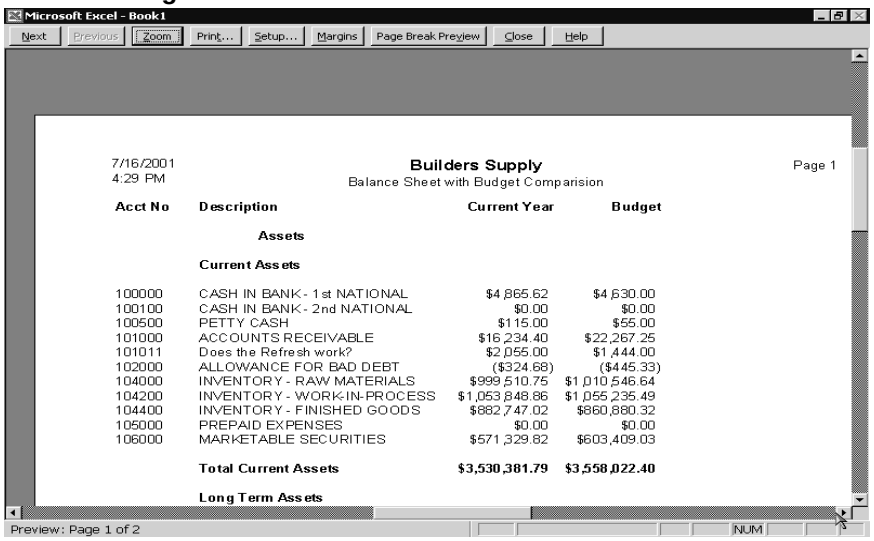
Page Setup



The Page Setup is re-displayed, showing the customized header.

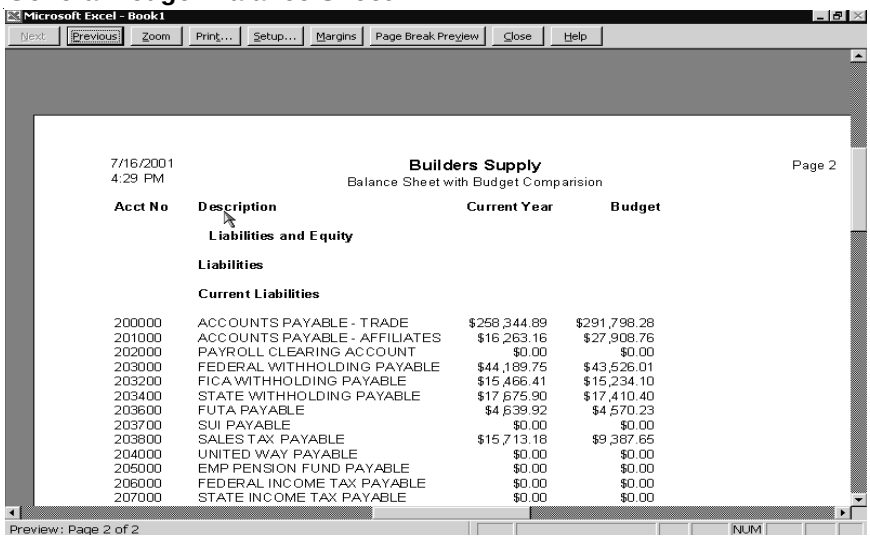
Click OK to save the Page Setup

General Ledger Balance Sheet



Reprint the spreadsheet.

General Ledger Balance Sheet



Build Shadow Dictionary

A

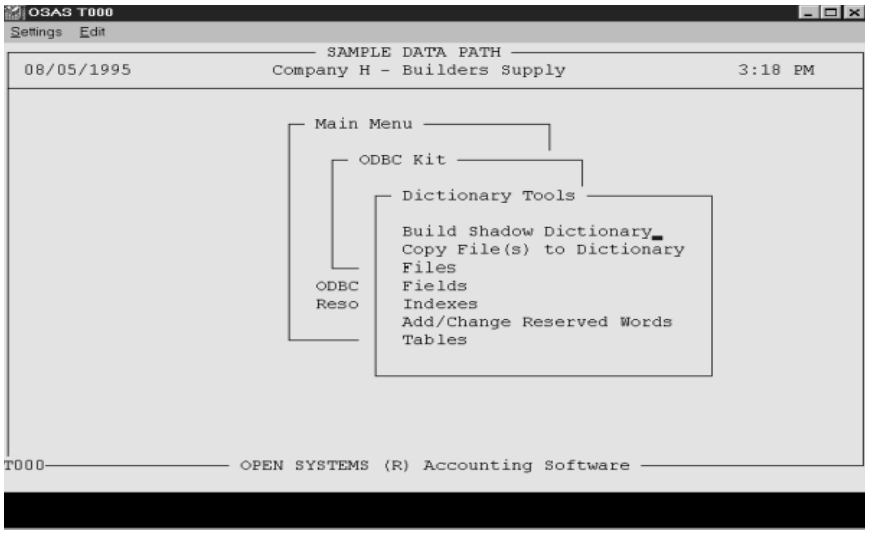
If you are using version 1.1 of the Basis ODBC Drivers, (OSAS version 6.02 or earlier) you must run the Build Shadow Dictionary function to access the OSAS data.

A *shadow dictionary* is a streamlined copy of the main data dictionary that is used by the ODBC driver to access the data in the data files. The shadow dictionary is used because it is more efficient for data retrieval than the main dictionary.

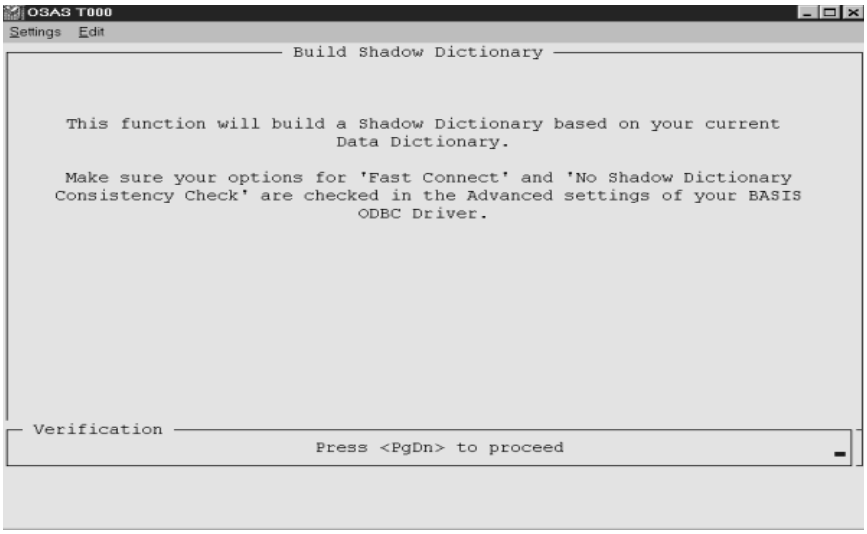
Creating a shadow dictionary allows faster access to your data when you use the driver. Once you have created the shadow dictionary, you can check the **"Fast Connect"** and **"No Shadow Dictionary Consistency Check"** options in the ODBC driver setup to allow the faster access.

Use the Build Shadow Dictionary function to create the shadow dictionary, and to update the shadow dictionary after changes are made to the main data dictionary

Dictionary Tools Menu



Build Shadow Dictionary Screen



To create the shadow dictionaries perform the following:

Select Build Shadow Dictionary from the Dictionary Tools menu.

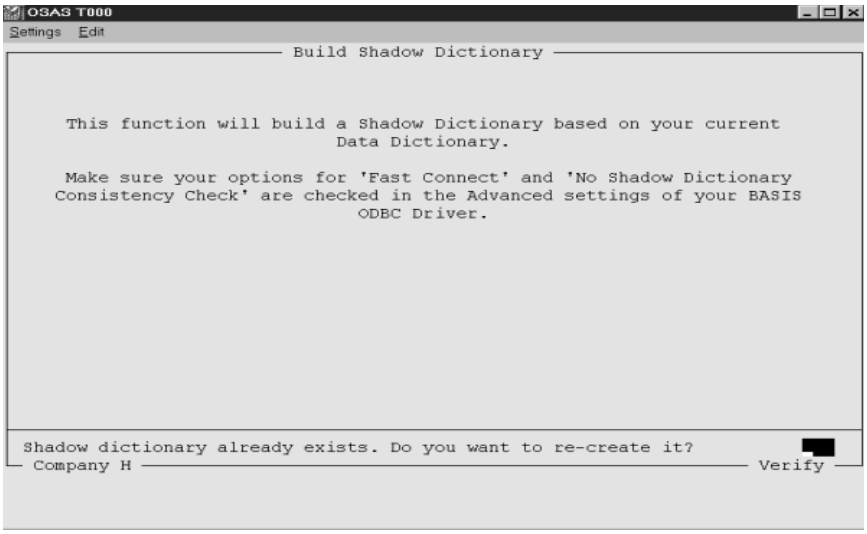
The first time you run the Build Shadow Dictionary function, the **Proceed** command, **PgDn** or **Esc P**, is displayed to create the shadow dictionaries.

There is also a reminder – ***Make sure you options for 'Fast Connect' and 'No Shadow Dictionary Consistency Check' are checked in the Advanced settings of your BASIS ODBC Driver.***[18]

The system creates a shadow dictionary for all OSAS data dictionaries installed, and for any files, fields or indexes added through those functions.

18. The Fast Connect and No Shadow Dictionary Consistency Check options are selected when you create a data source using the BASIS ODBC Driver version 1.1. This function is not done through OSAS.

Re-create Shadow Dictionary Screen



If the shadow dictionaries have already been created you are prompted, "***Shadow dictionary already exists. Do you want to re-create it?"***

Select, **Y**, for Yes, if you want to overwrite the old set of shadow dictionaries and create a new set.

Select **N**, for No, if you do not want to rebuild the shadow dictionaries

Note

You only need to run the Build Shadow Dictionary function once, unless an application is installed after the shadow dictionaries have been created[19] or if you create or edit files, fields or indexes after the shadow dictionaries have been created.

19. In version 5.2 the ODBC Kit must also be reinstalled if you add an application after the shadow dictionaries have been built.

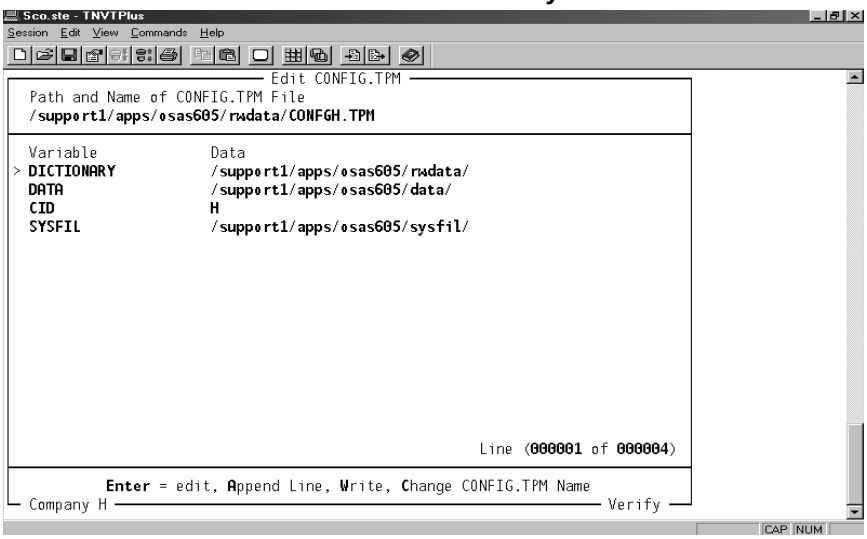
Unix/LINUX CONFIG.TPM File

B

If your OSAS data is stored on a UNIX or LINUX system, you cannot use the Edit CONFIG.TPM function in OSAS to create a configuration file, unless you are using a data server.

UNIX and LINUX do not use drive letters or colons for paths but the BASIS ODBC Driver needs a drive letter and colon for the DICTIONARY, DATA and SYSFIL paths.

Edit CONFIG.TPM Selection Screen UNIX System



This configuration file can cause errors when trying to link to the OSAS files.

To prevent this problem you must first use NFS software on the Windows machines where the BASIS ODBC Drivers are installed. NFS software allows you to map the UNIX or LINUX volume as a regular Windows/Dos drive.

Once the drives are mapped use any text edit to create the configuration file[20].

The file should have a minimum of four lines.

Line one should contain the DICTIONARY variable and the path using the NFS mapped drive to point the directory containing the data dictionaries.

Line two should contain the DATA variable and the path using the NFS mapped drive to point to the directory containing the OSAS data you want to access with this configuration file.

Line three should contain the CID variable and the company ID for the data files you want to access.[21]

Line four should contain the SYSFIL variable and the path using the NFS mapped drive to point to the sysfil directory in OSAS. The sysfil directory contains some Resource Manager data files.

The following example uses N as the NFS mapped drive. The configuration file should look like this:

DICTIONARY=N:/OSAS/RWDATA/
DATA=N:/OSAS/DATA/
CID=H
SYSFIL=N:/OSAS/SYSFIL

Save the file and store it anywhere on the Windows machine

Note

If you use DATA2 or DATA 3 or have any other variables, such as last year PA or GL files, add those to the configuration file also.

20. The configuration file does not have to have the name CONFIG.TPM. The file is an 8.3 Dos file and is only required to have the TPM extension, but can have any name you want.
21. If you have multiple companies, you must create a configuration file for each company.

ODBC Security C

There are some security issues with ODBC because there are no options in OSAS to prevent someone from having access to certain files. All the data dictionaries are installed in the same files and you cannot limit the access to those data dictionaries by application. So, if you have someone locked out of an application in OSAS, like Payroll or General Ledger, they will be able to access those data files in a third party product, such as Excel or Access using the ODBC Drivers and with the Read/Writer drivers they could even change the data files.

To prevent unauthorized people from accessing certain data files you have to create a second set of data dictionaries, and store the second set in a secure directory network that has limited access on the network or store the second set of data dictionaries to your local drive.

In the original set of data dictionaries, only include the files you want everyone to access. In the second set of data dictionary files, only include the files you want secured.

To create a secure set of data dictionary files perform the following steps:

This example uses the Payroll files but the steps will be the same for any application you want secured.

1. At the operating system level copy the ***.OSI** files from the SYSFIL[22] directory to the RWdata directory.

2. Erase the DD_*.OSI files that were copied to the RWdata directory.

3. Rename the remaining copied *.OSI files to a different extension other then OSI.

Note

The extension used in the rename does not matter because the files have to be renamed to have a .1 extension when you move them to the secure directory[23].

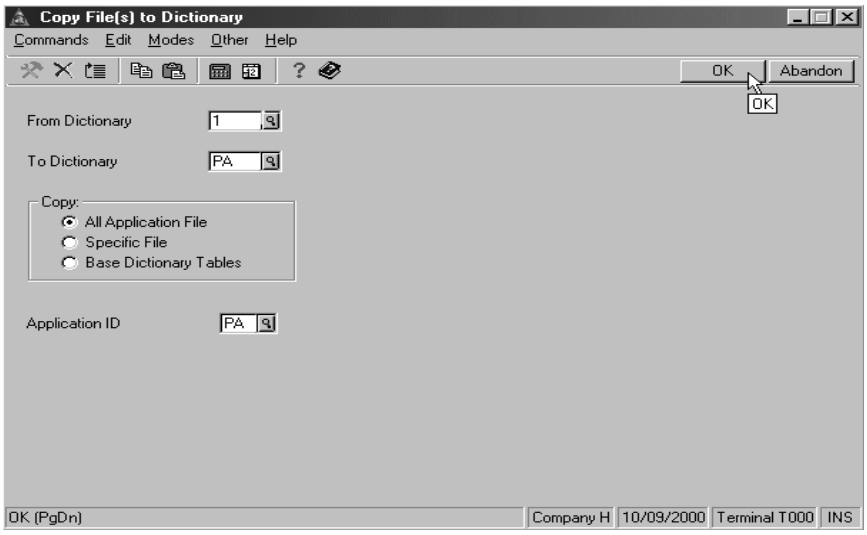
Note

DO NOT rename the files to .1 while they are in the RWdata directory or you risk overwriting the original .1 data dictionary files

Example: *Rename the copied *.OSI files to *.PA if you are creating Payroll data dictionary files.*

22. In 5.2 the *.OSI files are in the progRM directory.
23. The ODBC Drivers will only work with data dictionary files that have a .1 extension.

Copy File(s) To Dictionary



4. In OSAS, Select Copy File(s) to Dictionary from the Dictionary Tools menu. This will allow you to copy the data dictionary files from the main dictionary to the new dictionary.

5. Enter the following:

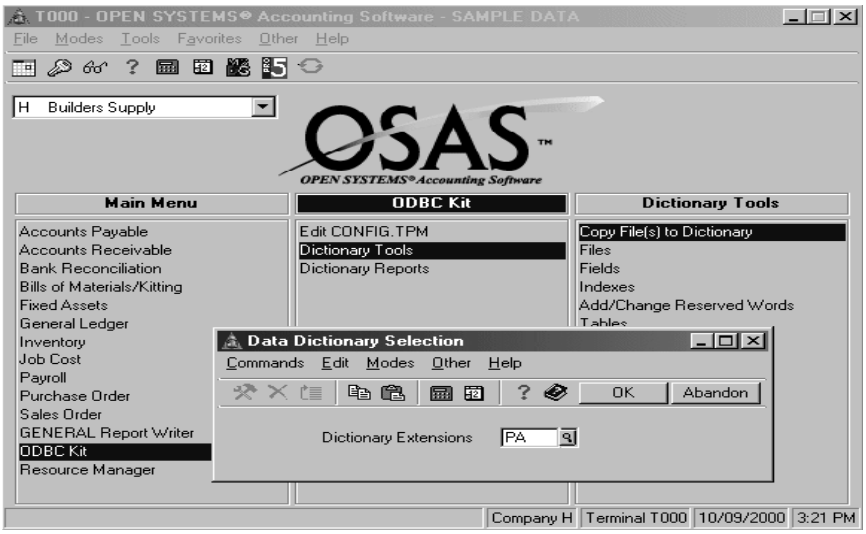
Field	Description
From Dictionary	Enter the extension of the source data dictionary files. This is usually 1 to copy the .1 data dictionary files. The **Inquiry** command, **F2** or **Esc W,** is available to select the source files.
To Dictionary	Enter the extension of the destination data dictionary files. This will be the extension you used to rename the copied *.OSI files. The **Inquiry** command, **F2** or **Esc W**, is available to select the destination files. PA in this example.
Copy:	Select **1**, for All Application File, to copy the data dictionary files for a specific application.
Application ID	Enter the id for the application whose data dictionary files you want to copy. The **Inquiry** command, **F2** or **Esc W**, is available to select the application to copy. PA in this example

This will copy all the selected application files, fields and indexes from the ***.1** data dictionary files to the ***.**PA (or to the extension you used for the copied files).

If you are using the 2.3 or 3.0 version of the ODBC drivers (OSAS 6.05 or higher) skip to step 8.

If you are using the 1.1 version of the ODBC drivers (OSAS 5.2 or 6.02) proceed to step 6.

Data Dictionary Select Screen



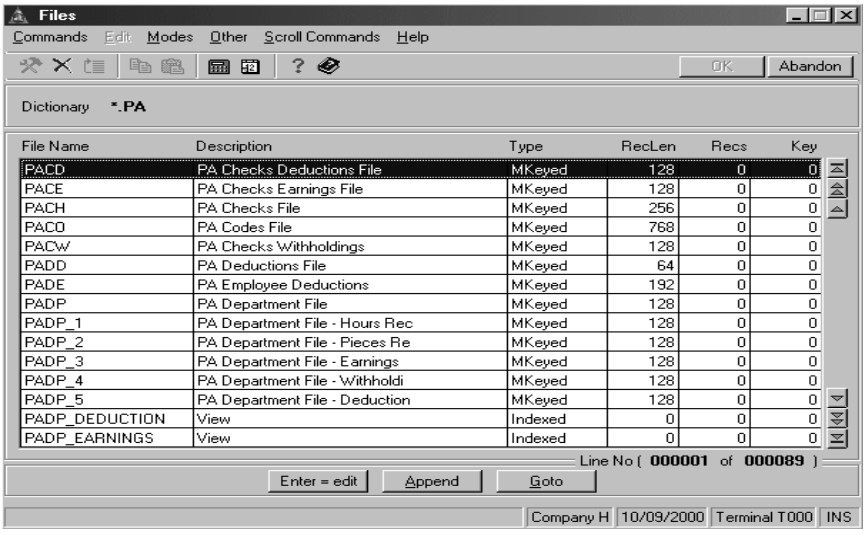
6. Once the files have been copied, use the **F9** from any ODBC menu to switch the copied data dictionary files.

You can use the **Inquiry** command, **F2** or **Esc W**, to select the data dictionary files you want to access.

You can check in Files or Fields to verify that you have switched to the correct set of data dictionary files.

Field	Description
Dictionary	Displays the current set of data dictionary files in use on the current terminal.

PA Data Dictionary Files Screen



7. Once you have switched to the new data dictionary files run the Build Shadow Dictionary functions from the Dictionary Tools menu.

   This will build files for the current set of data dictionary files in use on the current terminal.You may be prompted: *Shadow dictionary already exist. Do you want to re-create it?* Select **Y**, for **Yes**.

8. At the operating system level move the 13-copied data dictionary files[24] (*.PA in this example) from the RWdata directory to the secured subdirectory or your local drive.

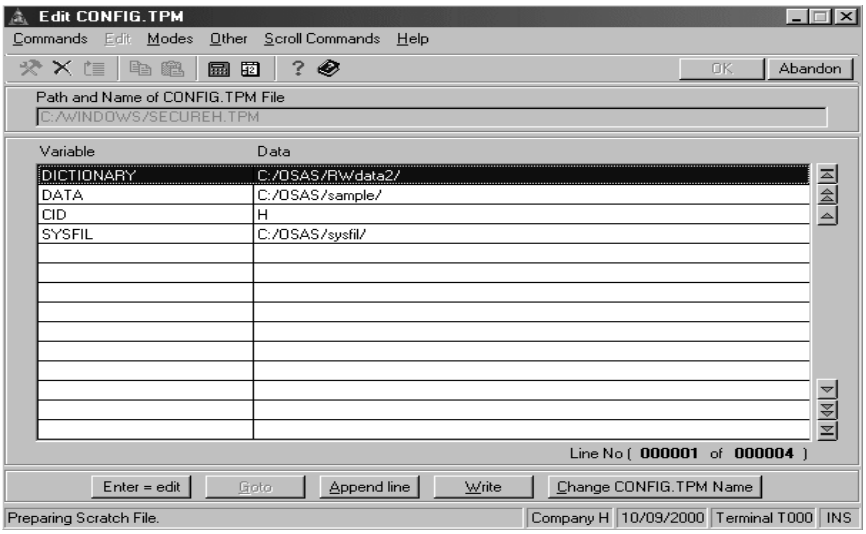
Note

If you use a directory on the network, **DO NOT** use any directories listed in the Directories function in Resource Manager or any directories listed in Application Information in Resource Manager. Anyone will be able to access this new set of data dictionary files through OSAS, if they are moved to either of those locations.

   You can create a different subdirectory under your OSAS directory for the second set of data dictionary files, such as RWdata2. This will not be listed in the Directories function or Application Information so no one will have access to the data dictionary files through OSAS.

9. In the secured subdirectory, rename the 13 new data dictionary files to have a **.1** extension[25]

Edit CONFIG.TPM Screen



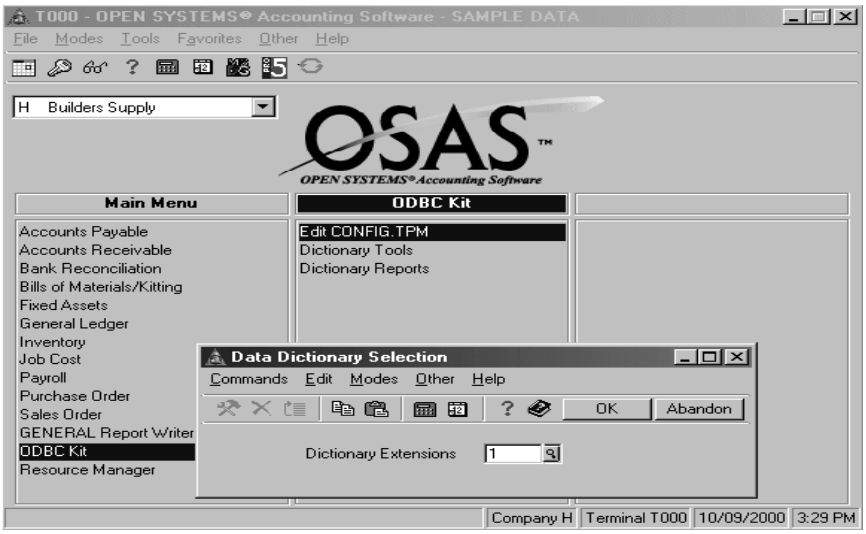
10. Select Edit CONFIG.TPM from the ODBC Kit menu to create a new configuration file.

    Edit the Dictionary variable to point to the drive and directory where you copied the new data dictionaries.

11. Copy the configuration file to the secure directory or your local hard drive.

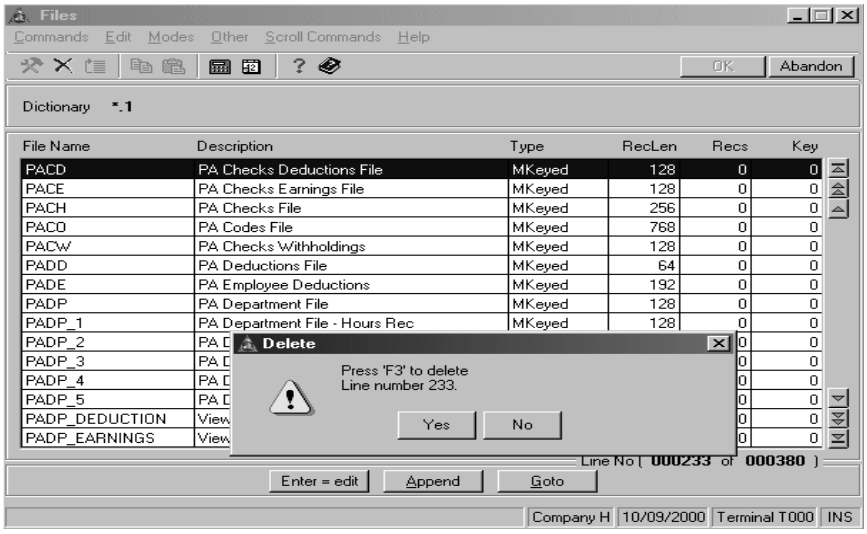
24. If you are using the 1.1 ODBC drivers move the DD_*.DAT files as well.
25. The ODBC Drivers will only work with files that have a **.1** extension. **DO NOT** rename the DD_*.DAT files.

Data Dictionary Select Screen



12. Use the **F9** and switch back to the **.1** Data Dictionaries.

Main Data Dictionary Files Screen – Deleting Files



13. Select Files from the Dictionary Tools menu and delete the data dictionary files that you do not want to give everyone access, using the **Delete** command, **F3** or **Esc D**.

In this example, delete the Payroll data dictionary files.

If you are using the 2.3 or 3.0 ODBC drivers, you are done[26].

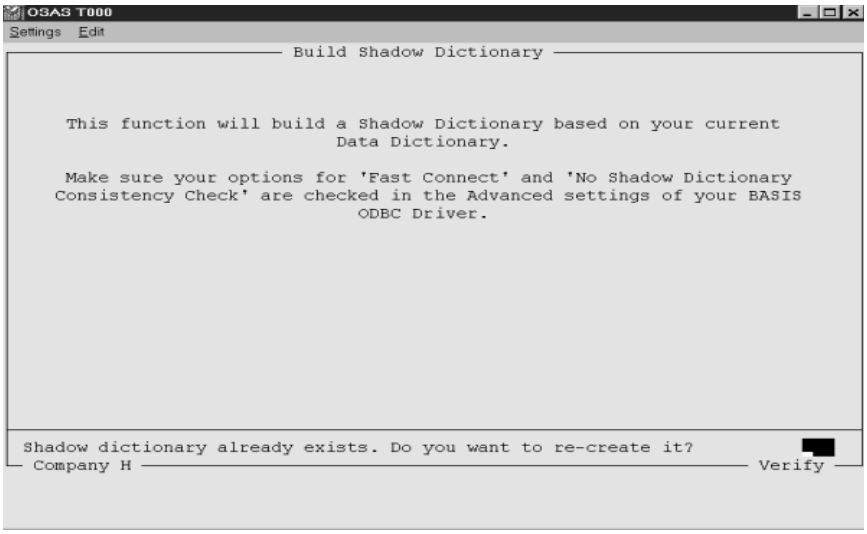
If you are using the 1.1 ODBC drivers, proceed to step 14.

---

26. To edit these data dictionary files you will have to copy or move them back to the **RWdata**, **ProgRm** or **ProgOD** directories.
These data dictionary files have the same name and extension as the main data dictionary files, so you must rename them before you copy them to insure you do not overwrite your main data dictionary files.

Use the **F9** to switch between the data dictionaries.

Build Shadow Dictionary Screen



14. Select the Build Shadow Dictionary function from the Dictionary Tools menu, to re-create the shadow dictionary files for the edited set of main dictionary files[27]

27. To edit these data dictionary files you will have to copy or move them back to the **RWdata**, **ProgRm** or **ProgOD** directories.

Since these data dictionaries have the same file name and extension as the main data dictionaries, rename them before you copy them to insure you do not overwrite your main data dictionaries.

Use the **F9** to switch between the data dictionaries. If you make any changes you will have to re run the Build Shadow Dictionary function and copy the new **DD_*.DAT** files and the second set of data dictionaries back to the secured directory. Rename them back to ***.1**. Use the **F9** to switch back to the original***.1** dictionaries and run the Build Shadow Dictionary function again.

Accessing Previous Year Data

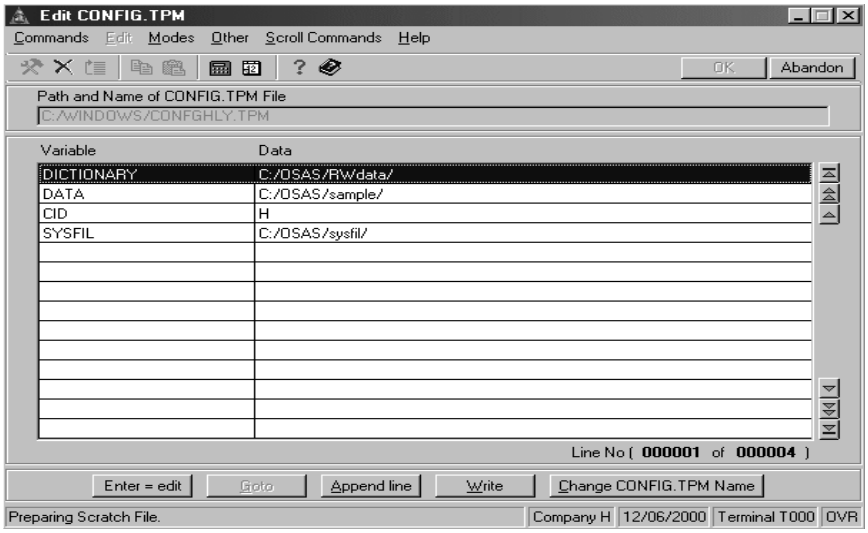
D

Use the following steps to access last year Payroll or previous year General Ledger data with ODBC. These steps will work with the 3.0, 2.3 or the 1.1 Basis ODBC Drivers.

You will need to create a separate configuration file for last year Payroll and current year Payroll and a separate configuration file for each GL Year you want to access.

Create a configuration file with the Edit CONFIG.TPM function in ODBC Kit.

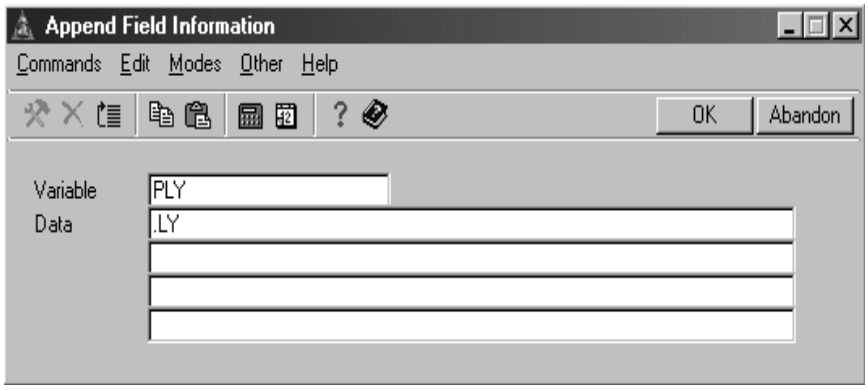
Edit CONFIG.TPM



Payroll Variable for Last Year Files

Use the Append function to add Variables for last year Payroll.

Append Field Information – PLY Variable



Field	Description
Variable	Enter the name of the variable you want to add. The variable name can be anything you want. This variable will be added to the ODBC Path field in Files, which will allow you to access the data you want. If you are using 6.1x the variable for last year payroll has already been added to the data dictionary file. Add that variable to the configuration file to access last year's payroll with ODBC. The variable used is PLY, but you can use any variable name you want. If you use a different variable name, you will have to change each file to match the new variable name. If you are using 6.05 or lower, you must add the variable name used to each file with the Files function on the Dictionary Tools menu. You can use the same PLY variable name or create a different one.
Data	Enter the extension of the data file in OSAS that you want to access with the ODBC drivers. For Last Year Payroll files enter "**.LY**" (without the quotes)

This variable will access Payroll files that have a LY extension

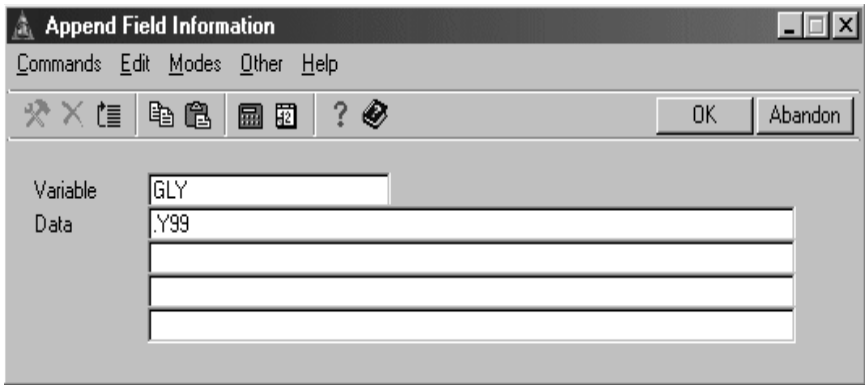
Use the **Proceed** command, **PgDn** or **Esc P**, to save the variable.

General Ledger Variable for Previous Year Files

You can add the General Ledger Variable for pervious years to the same configuration file as the Payroll Variable or you can create a new configuration file for the GL variable.

Use the Append function to add Variables for the General Ledger year you want to access.

Append Field Information – GLY Variable



Field	Description
Variable	Enter the name of the variable you want to add. The variable name can be anything you want. This variable will be added to the ODBC Path field in Files, which will allow you to access the data you want. If you are using 6.1x, the variable for pervious year general ledger files has already been added to the data dictionary file. Add that variable to the configuration file to access last year's payroll with ODBC. The variable used is GLY, but you can use any variable name you want. If you use a different variable name, you will have to change each file to match the new variable name. If you are using 6.05 or lower, you must add the variable name used to each file with the Files function on the Dictionary Tools menu. You can use the same GLY variable name or create a different one.
Data	Enter the extension of the data file in OSAS that you want to access with the ODBC drivers. For Previous Year GL files enter ".**Yxx**" (without the quotes), where xx represents the GL Year you want to access. This example uses Y99.

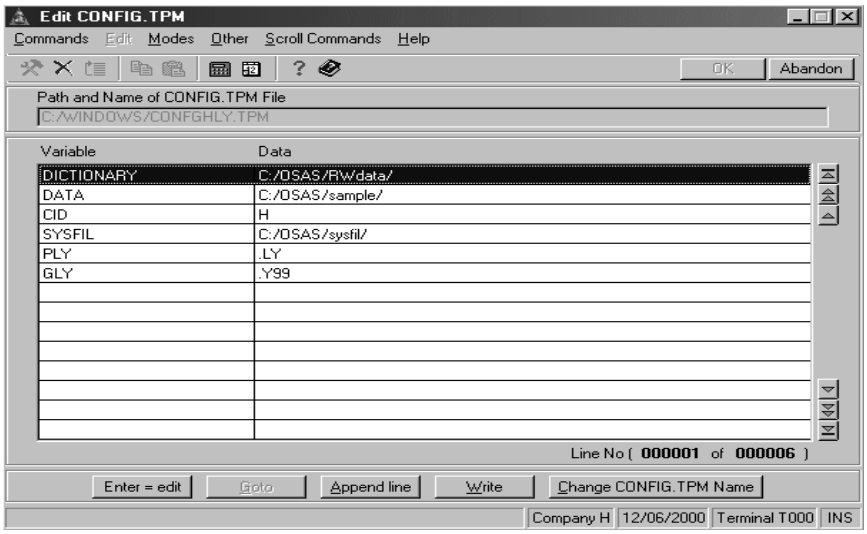
This variable will access General Ledger files that have a Y99 extension[28].

Use the **Proceed** command, **PgDn** or **Esc P**, to save the variable.

28. Each GL Year will require a separate configuration file.

The TPM file should look something like the following.

TPM File



Select Write to save the changes to the configuration file.

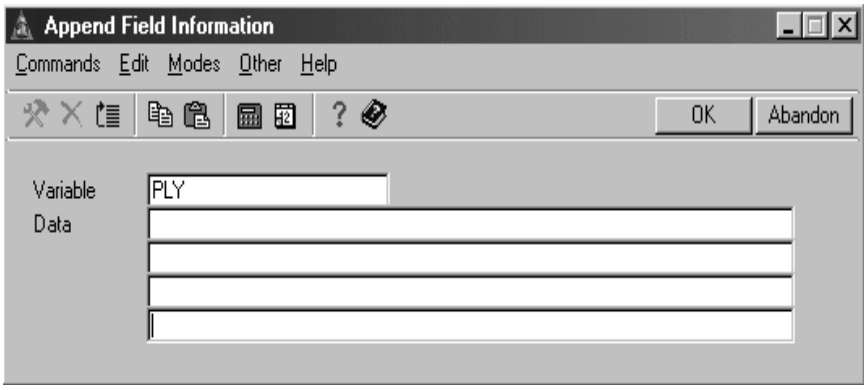
Next, create a configuration file to access current year data.

Create a configuration file with the Edit CONFIG.TPM function in ODBC Kit.

Payroll Variable for Current Year Files

Use the Append function to add Variables for current year Payroll.

Append Field Information – PLY Variable



Field	Description
Variable	Enter the same name you used for the last year Payroll variable. If you are using 6.1x the variable for last year payroll has already been added to the data dictionary file. Add that variable to the configuration file to access last year's payroll with ODBC. The variable used is PLY, but you can use any variable name you want. If you use a different variable name, you will have to change each file to match the new variable name. If you are using 6.05 or lower, you must add the variable name used to each file with the Files function on the Dictionary Tools menu. You can use the same PLY variable name or create a different one.
Data[1]	Leave this field blank. OSAS stores the current year Payroll files without an extension.

1.The configuration file for last year data contained a .LY in the data field. This means ODBC will look for a file with a LY extension, after the variable is added end of the file in Dictionary Tools. The last year configuration file will only access the last year files. If the files are not available, you will get Fserr=13 in Excel (same as and error 12, missing or duplicate file) or you will get an error message in Access "Query must have at least one destination field".

You MUST create another configuration file to access current year data, using the same variable name but leaving the data field blank. ODBC will look for a file without an extension. If the files are not available you will get Fserr=13 in Excel, or and error message in Access "Query must have at least one destination field"

This variable will access Payroll files that do not have an extension, which is how OSAS stores the current year files.

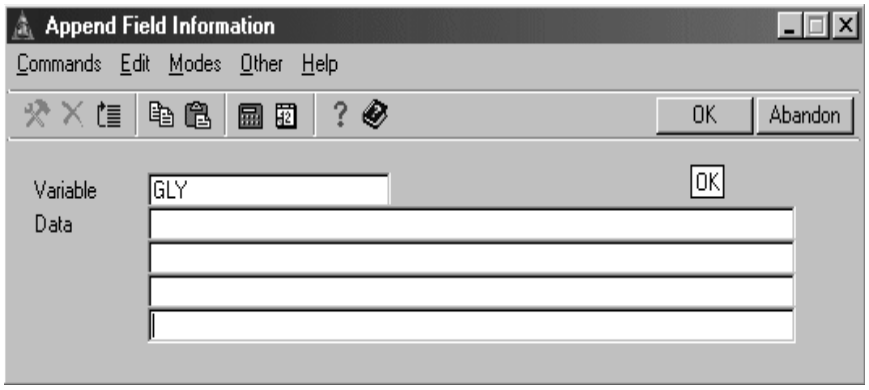
Use the **Proceed** command, **PgDn** or **Esc P**, to save the variable.

General Ledger Variable for Current Year Files

You can add the General Ledger Variable for current year to the same configuration file as the Payroll Variable or you can create a new configuration file for the GL variable.

Use the Append function to add Variables for the General Ledger year you want to access.

Append Field Information – GLY Variable



Field	Description
Variable	Enter the same name you used for the previous year General Ledger variable. ***If you are using 6.1x, the variable for previous year general ledger files has already been added to the data dictionary file. Add that variable to the configuration file to access last year's payroll with ODBC. The variable used is GLY, but you can use any variable name you want. If you use a different variable name, you will have to change each file to match the new variable name.*** ***If you are using 6.05 or lower, you must add the variable name used to each file with the Files function on the Dictionary Tools menu. You can use the same GLY variable name or create a different one.***
Data[13]	Leave this field blank. OSAS stores the current year GL files without an extension.

1.[3] The configuration file for previous year data contained a .Yxx (xx represents the GL year) in the data field. This means ODBC will look for a file with a Yxx extension, after the variable is added end of the file in Dictionary Tools. The previous year configuration file will only access the files for the year entered in the data field. If the files are not available, you will get Fserr=13 in Excel (same as and error 12, missing or duplicate file) or you will get an error message in Access "Query must have at least one destination field".

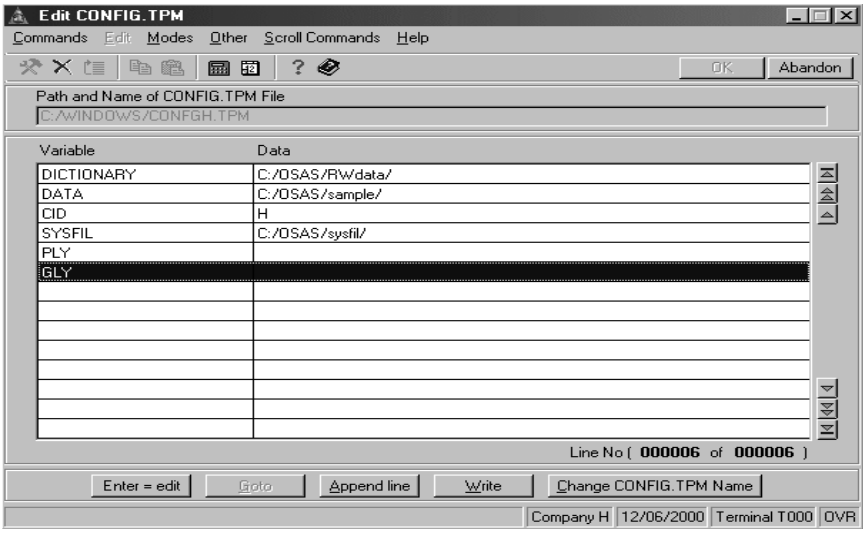
You MUST create another configuration file to access current year data, using the same variable name but leaving the data field blank. ODBC will look for a file without an extension. If the files are not available you will get Fserr=13 in Excel, or and error message in Access "Query must have at least one destination field"

This variable will access General Ledger files that do not have an extension, which is how OSAS stores the current year files.

Use the **Proceed** command, **PgDn** or **Esc P**, to save the variable.

The TPM file should look something like the following.

TPM File



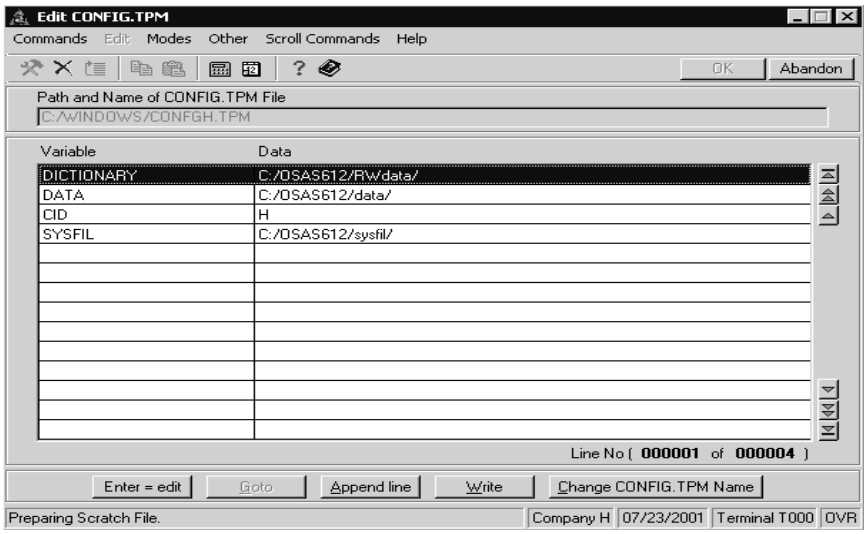
Select Write to save the changes.

Adding the Variables to Dictionary Files

If you are using 6.1x the PLY and GLY variables have already been added to the data dictionary files. If you are using 6.05 or earlier you will have to add the variables to each data dictionary file.

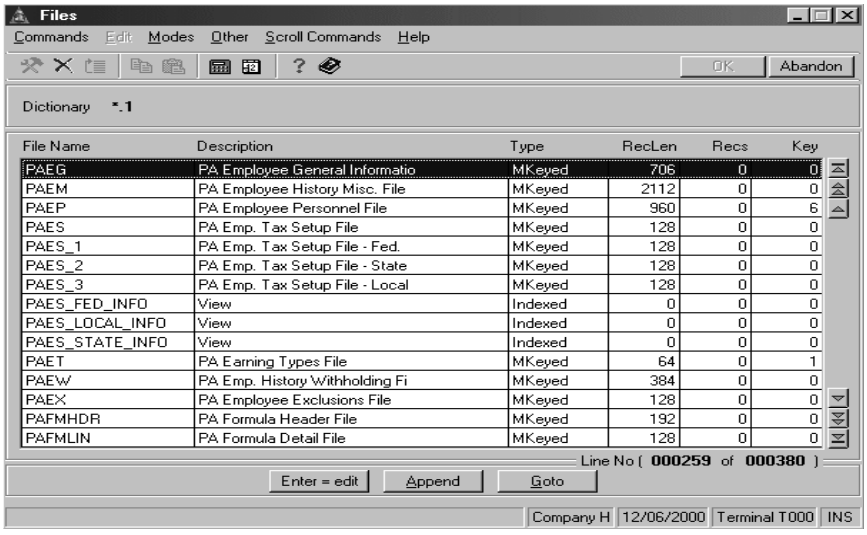
Select Files from the Dictionary Tools menu in the ODBC Kit.

Dictionary Tools Menu - Files

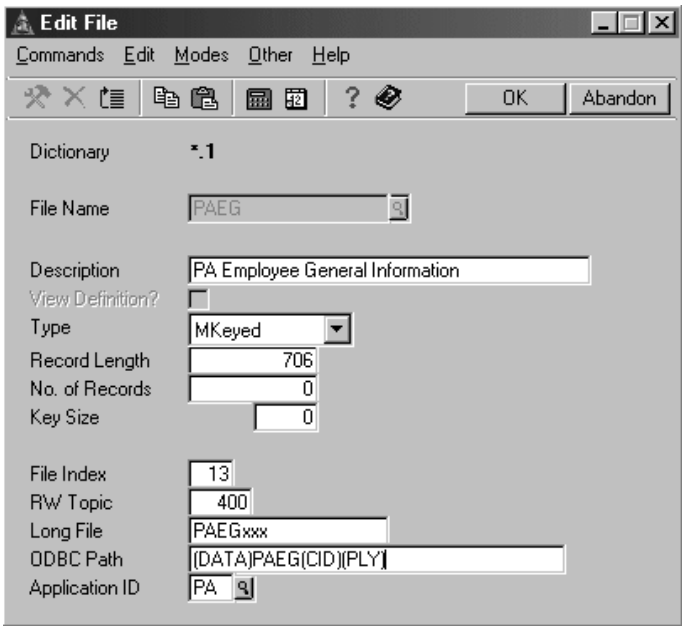


Select the file you want to add the variable to and press Enter to edit the file.

Files



Edit Files

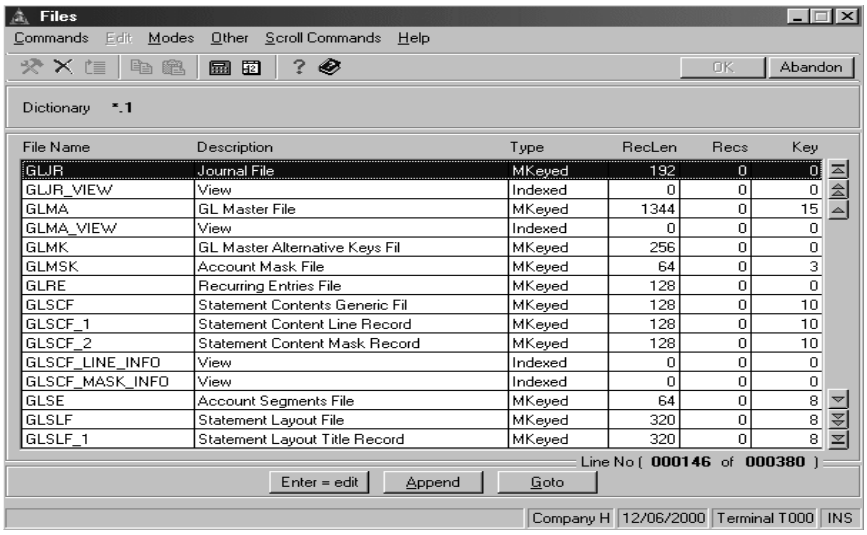


Add the Payroll variable within parentheses to the ODBC Path field.

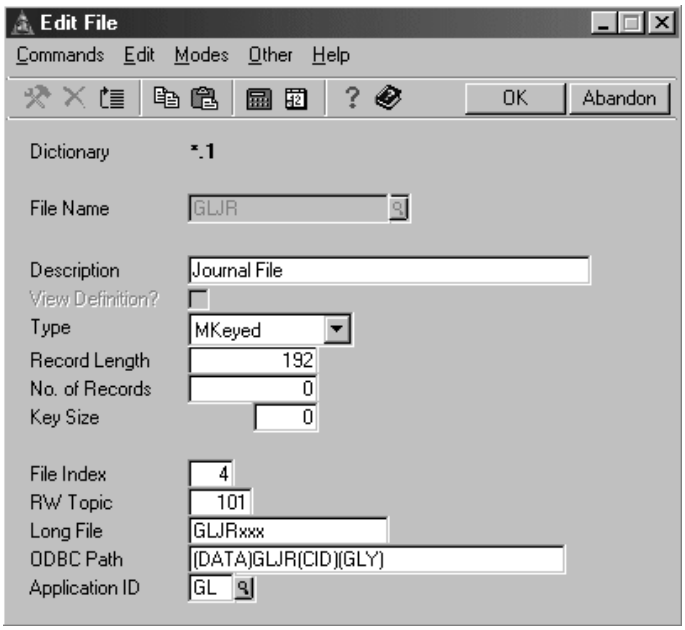
You will have to add this variable to each Payroll file that you want to access last year or this year data.

Repeat the same steps for the General Ledger files.

Files



Edit Files



Add the General Ledger variable to all the GL files you want to access pervious year information.

You will have to add this variable to each General Ledger file that you want to access previous year or this year data.

If you are using 6.05 or higher, you are now ready to access last year or current year data with ODBC

If you are using 5.22[29]- 6.02, you will have to run the Build Shadow Dictionary function to recreate the shadow dictionary to access last year or current year data with ODBC.

You will need to create a separate data source file, for each configuration file, using the Basis ODBC Driver.

One data source will access last year Payroll and previous year General Ledger files. The other data source will access current year Payroll and General Ledger files.

If you have more GL years you want to access, you must create a configuration file for each year and data source for each year..

29.For 5.22 you MUST have the latest 5.21A installed.

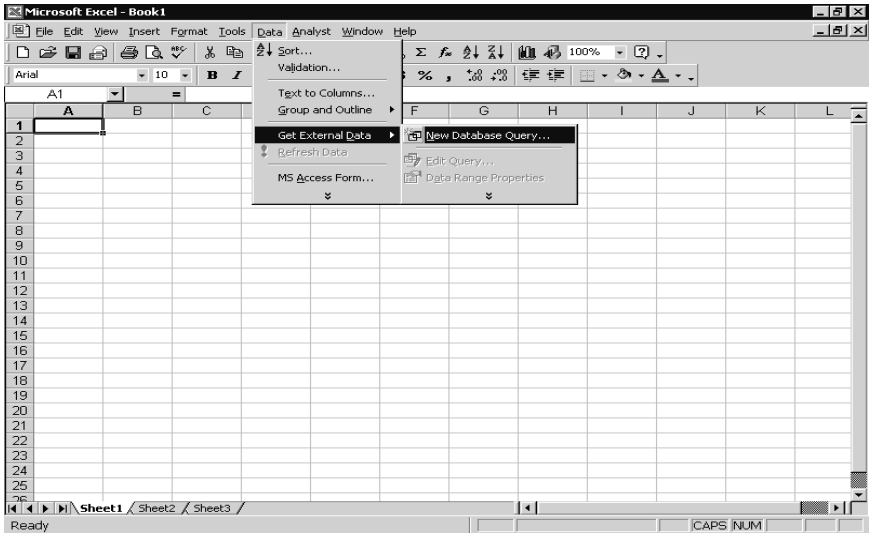
Creating a Data Source

E

Basis ODBC 3.0 and 2.3 Drivers

Using Excel/Query to create the data source

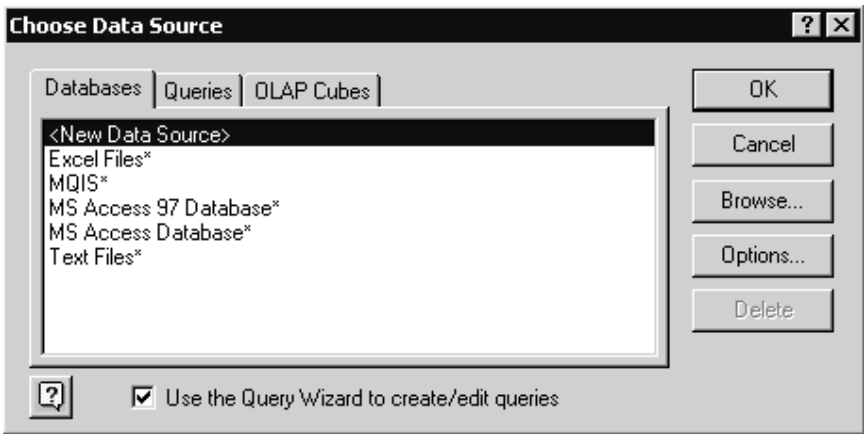
Get External Data – New Database Query Screen



Start Excel. From the Data menu select Get External Data followed by New Database Query[30].

30. With Excel 97 select Get External Data followed by Create New query. With Excel 2002 select Import External Data followed by New Database Query.

Choose Data Source Screen

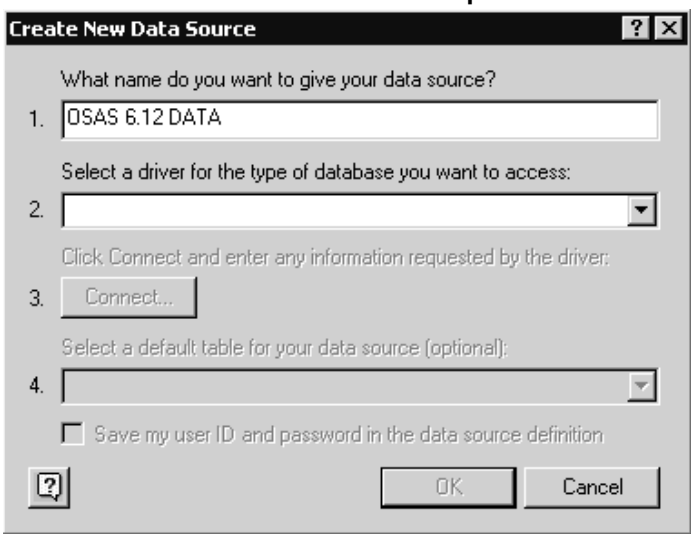


The Choose Data Source screen is displayed.

Select the data source you want to use for this query or choose <New Data Source> if the one you want to use is not listed.

Highlight <New Data Source> and select the OK button.

Create New Data Source Screen - Step 1



The Create New Data Source screen is displayed.

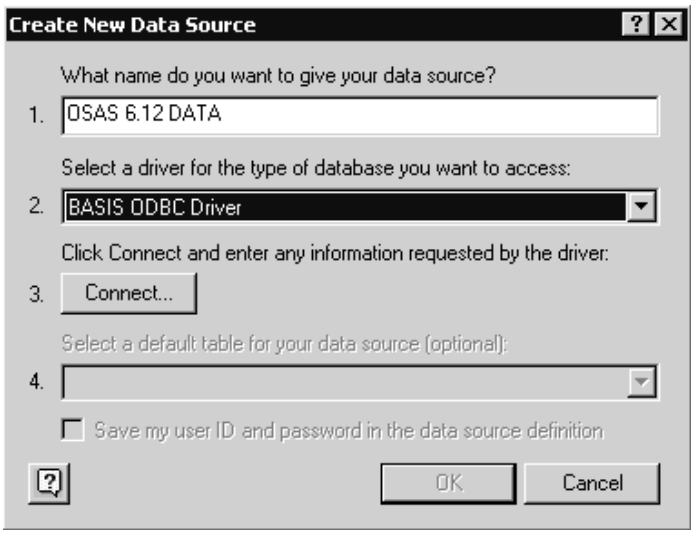
There are four steps in creating a data source.

1. Enter a name for the data source you are creating. The data source name can be anything you like.

Note

Enter a name that is easy for you to identify which company's information you are accessing.

Create New Data Source Screen - Step 2 and 3



2. Select the driver for the database you want to access.

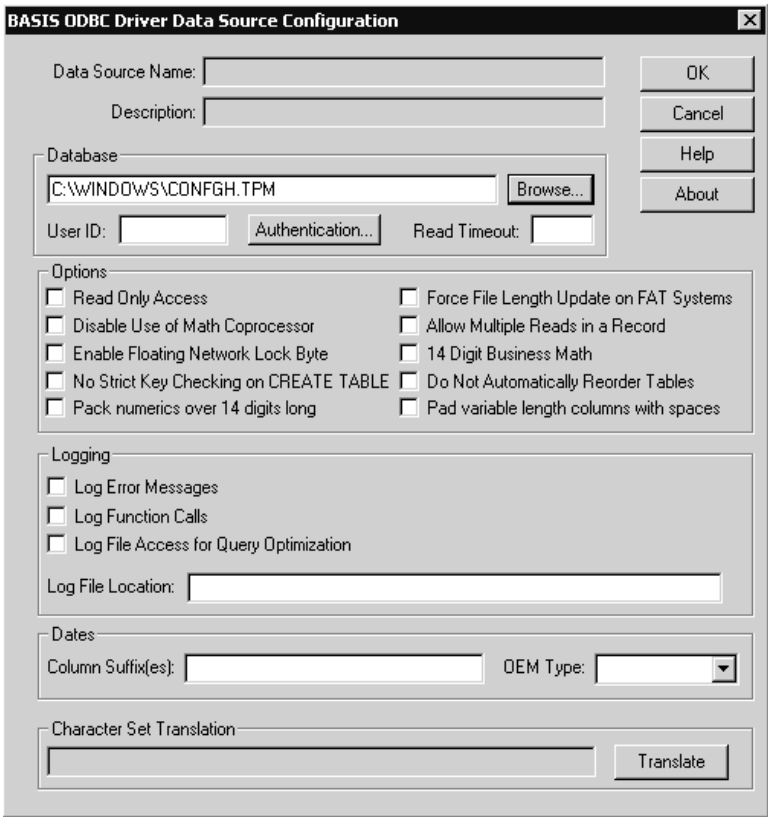
   For the OSAS data files, select the BASIS ODBC Driver[31].

3. Connect to the data source configuration file.

   Click the Connect button.

31. If you are using the 1.1 version of the ODBC Drivers, select BASIS ODBC Driver 32-Bit.

BASIS ODBC Driver Data Source Configuration Screen

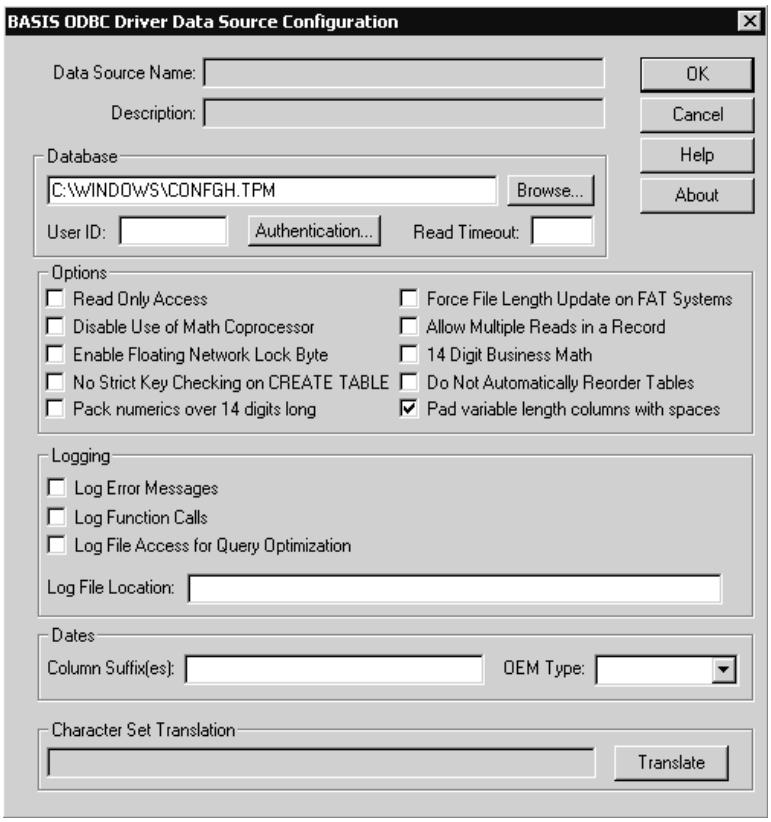


The BASIS ODBC Driver Data Source Configuration screen is displayed.

Enter the following:

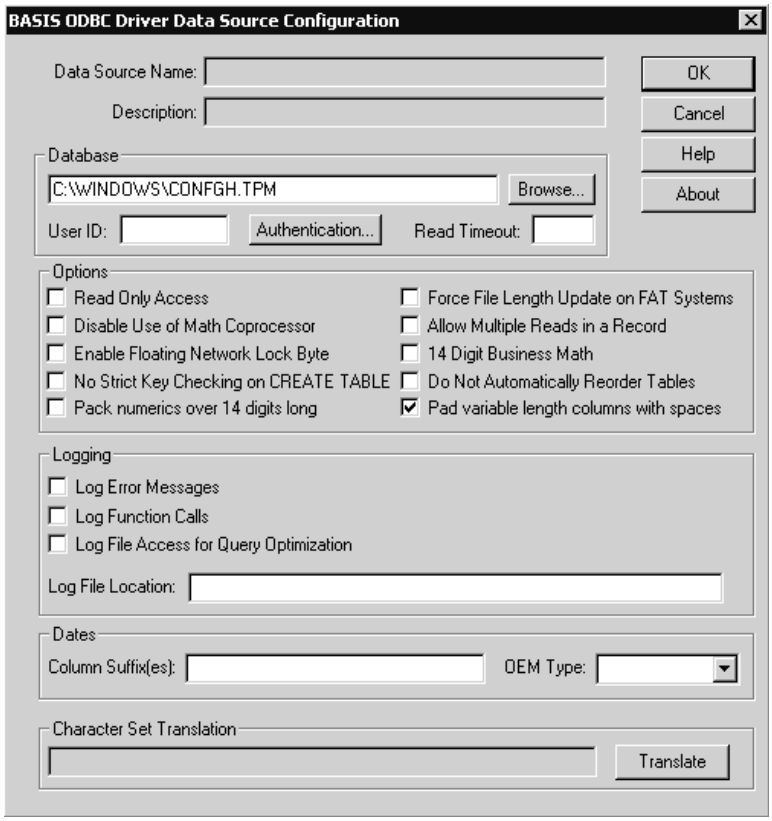
Field	Description
Data Source Name	This field is unavailable with Excel and Query data sources.
Description	This field is unavailable with Excel and Query data sources.
Database	Enter the path and filename of the configuration file you created with the Edit CONFIG.TPM function. Use the Browse button to search for the file. The default location is the RWdata directory in OSAS.
User ID	If you are using a data server with OSAS, you must enter a valid network user ID to use with this data source file. If you do not enter a valid user ID, you will not be able to access your OSAS data stored on the data server. Root, Admin, Supervisor, and Administrator are not allowed.
Authentication	Click this button for secure data servers that require user authentication. You can enter a User ID, Password and Domain, to authenticate the user logging in, or an Authentication String.
Read Timeout	Enter a number between 0 and 255 to indicate the number of seconds to wait for a locked record to become available. The default is 10.

BASIS ODBC Driver Data Source Configuration Screen



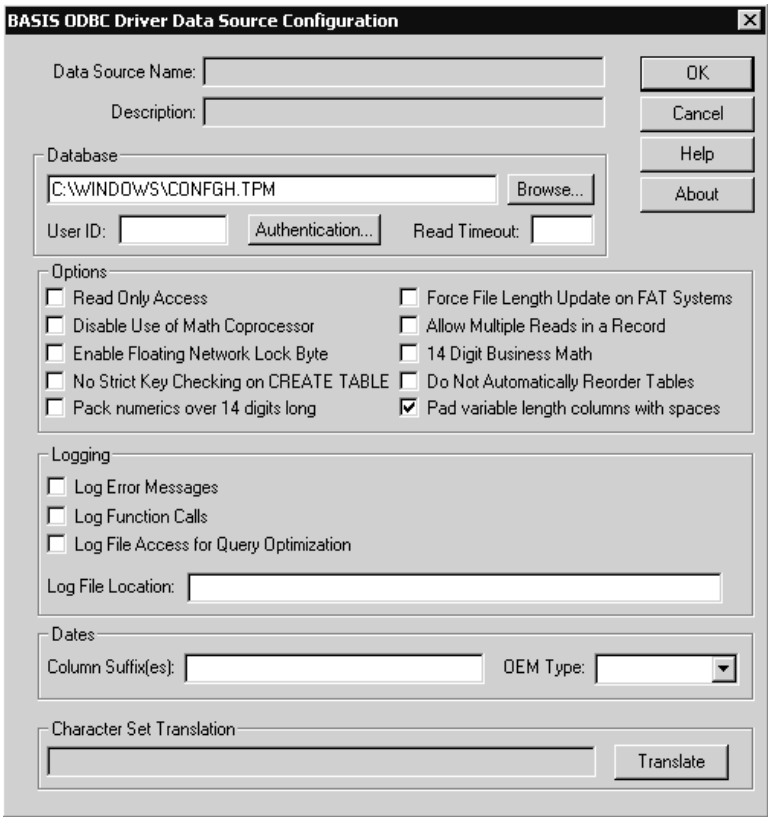
Option	Description
Read Only Access	Check this box if you are using the Read/Write version of the ODBC Drivers and you want this data source to allow read only access. Any changes made to the files are not allowed with read only access.
Disable Use of Math Coprocessor	Check this box, if you want to disable the use of the math coprocessor. On machines with math coprocessors, the ODBC Drivers may be able to use the coprocessor to enhance the speed and accuracy of the functions.
Enable Floating Network Lock Byte	Check this box to enable the older, slower file-locking scheme, which allows for standard access across the network.
No Strict Key Checking on CREATE TABLE	Check this box, if no primary key has been specified in the data files, creates a primary key using as many columns (fields) as can fit into the 120 character maximum key length. If this option is not select, then a primary key must be setup in each data file or errors will occur.
Pack numerics over 14 digits long	Check this box, if you have numeric values that are more then 14 digits to allow compression of these values into a pseudo-binary form to preserve disk space.

BASIS ODBC Driver Data Source Setup Screen



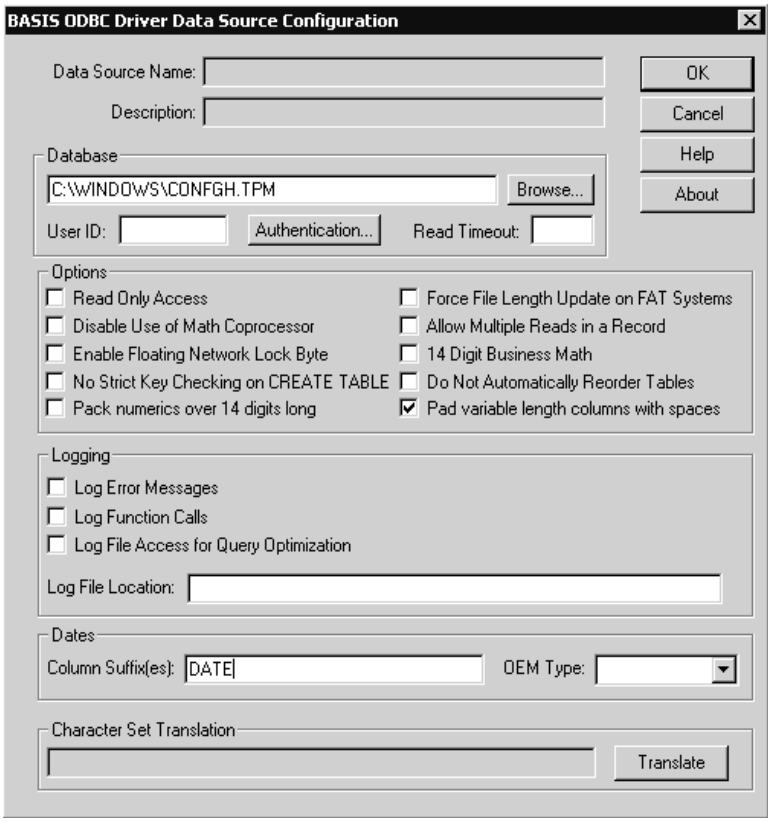
Option	Description
Force File Length Update on Fat Systems	Check this box to force MS-DOS to update the length of a dynamic file after any changes are made to the file.
Allow Multiple Reads in a Record	Check this box to allow multiple read processes to access the key of a keyed file.
14 Digit Business Math	Check this box to put the ODBC Drivers in a 14 digit Business Math mode. This forces keys and templates to use 14 digit Business Math precision.
Do Not Automatically Reorder Tables	The ODBC drivers may attempt to reorder the table if you are using a Select statement against multiple files, for optimization. Check this box, if you do not want the ODBC drivers to try to reorder the table.
Pad variable length columns with spaces	Check this option if you are using the Read/Write version of the ODBC Drivers, so that any updates you make to the OSAS files will be padded correctly.

BASIS ODBC Driver Data Source Setup Screen



Logging Field	Description
Log Error Messages	Check this option to write any error messages generated by the ODBC Drivers to the log file entered in the Log File Location field.
Log Function Calls	Check this option1to write each ODBC API function call to the log file entered in the Log File Location field.
Log File Access for Query Optimization	Check this option to write each file system read to the log file entered in the Log File Location field.
Log File Location	Enter the path and filename for the log file. This file is used by the Log Error Messages, Log Function Calls, and Log File Access for Query Optimization options.

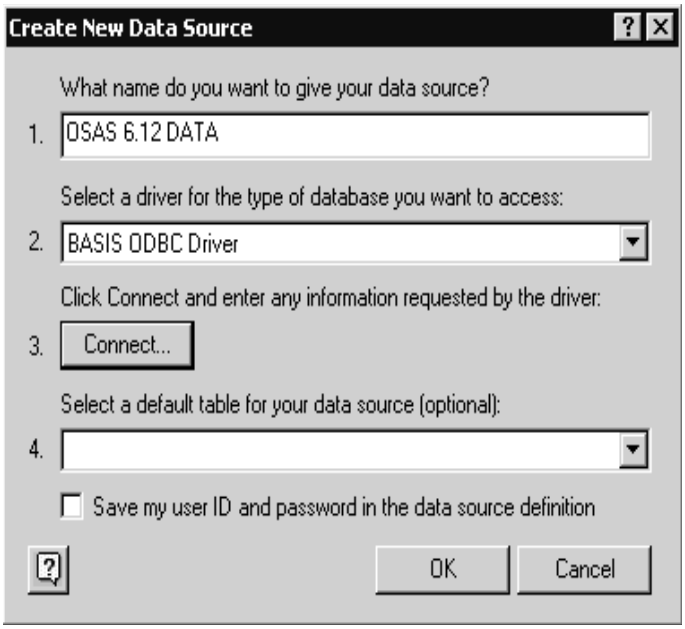
BASIS ODBC Driver Data Source Setup Screen



Dates Field	Description
Column Suffix(es)	Enter the suffix(es) of the columns that are to be converted to the OEM date type selected in the OEM Type field. More then one suffix can be entered. If more then one suffix is entered separate each with a comma.
OEM Types	By default, the numeric columns that end in the Date Column Suffix are treated as Julian Numbers and converted to SQL Dates. If you are using an OEM database that uses non-Julian numbers for the data format, select one of the OEM data types listed in the combo box to indicate your OEM date preference for columns ending in the Date Column Suffix.
Translation	Click this button to select the Microsoft Code Page Translator or other ODBC character translator.
Character Set Translation	The translator selected, if any, with the translation button is displayed.

Select the OK button to save the data source setup.

Create New Data Source – Step 4



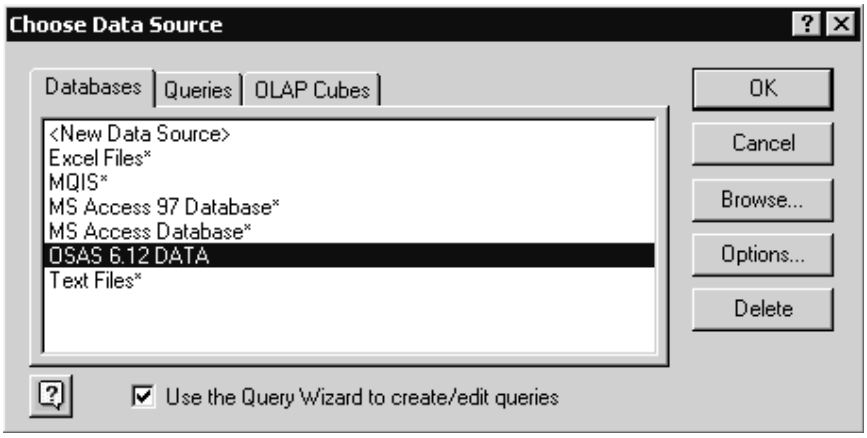
The Create New Data Screen is re-displayed.

4. Select an optional table for your data source. This table is selected by default, whenever you use this data source, but you can always select any table available.

   You can also save your user ID and password with this data source.

Click OK when finished.

Choose Data Source Screen

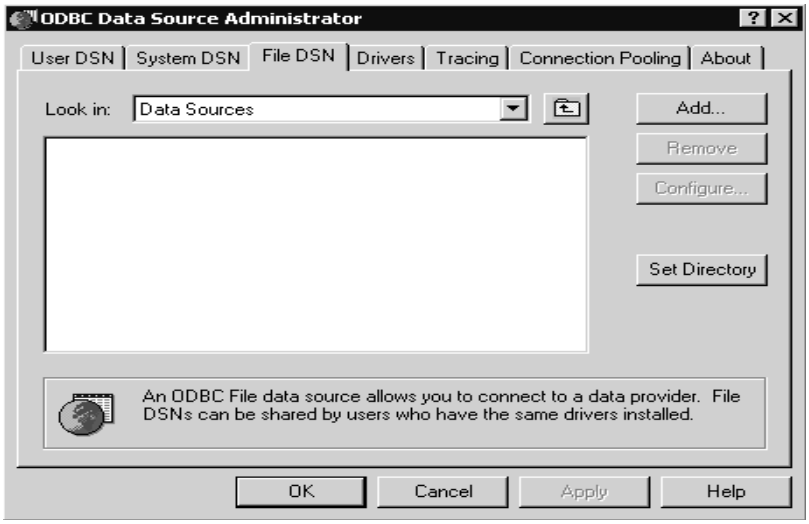


The Choose Data Source screen is re-displayed.

Place a check in the Use the Query Wizard to create/edit queries field, highlight the data source created and click OK.

Using the ODBC Administrator to create the data source

ODBC Data Source Administrator



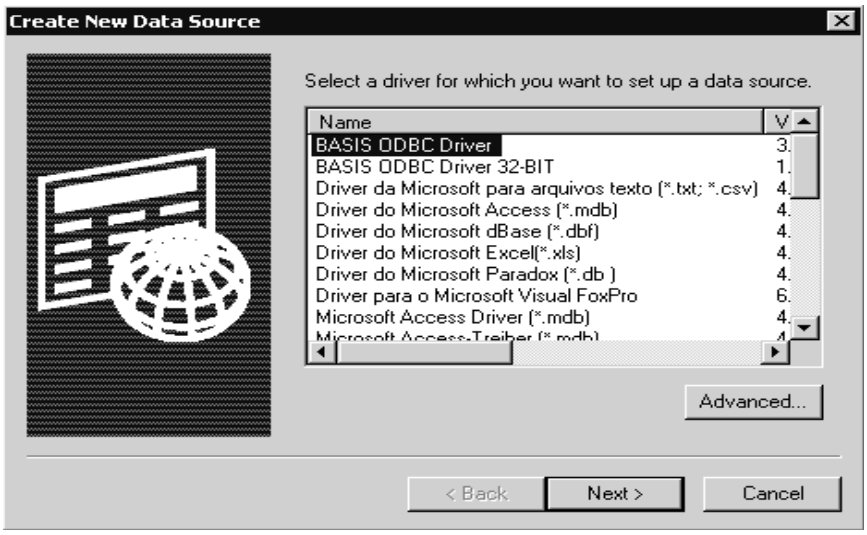
Create a Data Source with the 32-bit ODBC Administrator in the control panel.

Option	Description
User DSN	Creates a data source for this machine that only the user creating it can access.
System DSN	Creates a data source for this machine that anyone who uses this machine can access.
File DSN	Creates a data source that can be shared by users who have the same drivers installed.
Drivers	Displays the list of installed ODBC Drivers.
Tracing	Creates a log file of calls made to the ODBC Drivers. This can be used to aid support and debug your applications.
Connection Pooling	Allows applications to reuse open connection handles, which saves round-trips to the server.

Select File DSN for use with Excel and Query

Click the Add button to create the new data source.

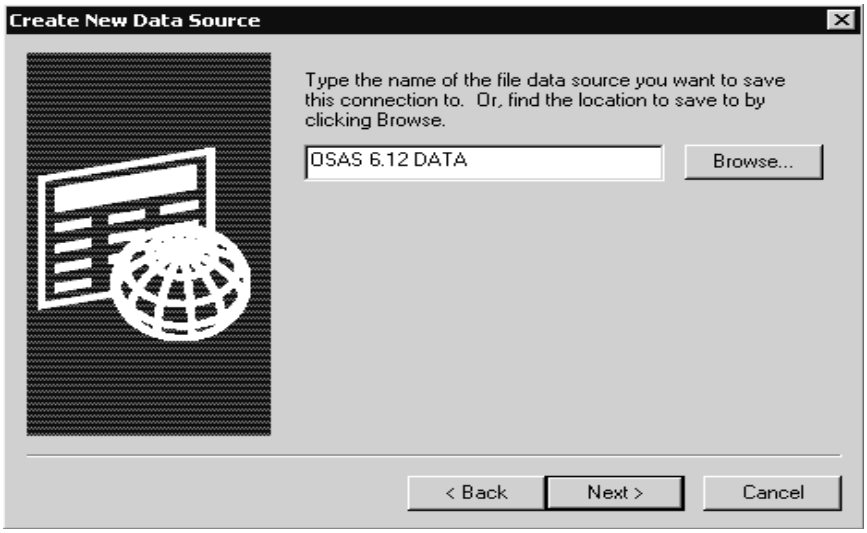
Create New Data Source



The Create New Data Source screen is displayed select the Basis ODBC Driver.

Select the Next button.

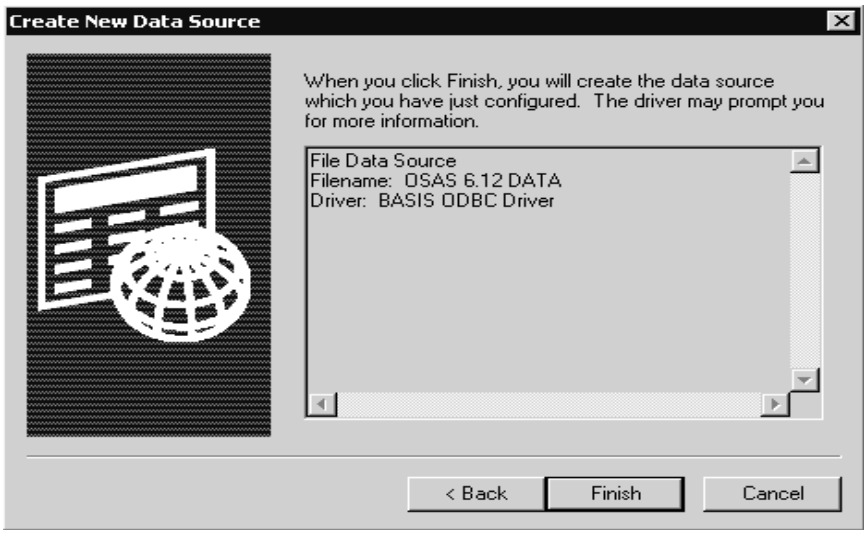
Create New Data Source



Enter a name for the data source or browse to an existing data source.

Click the Next button.

Create New Data Source

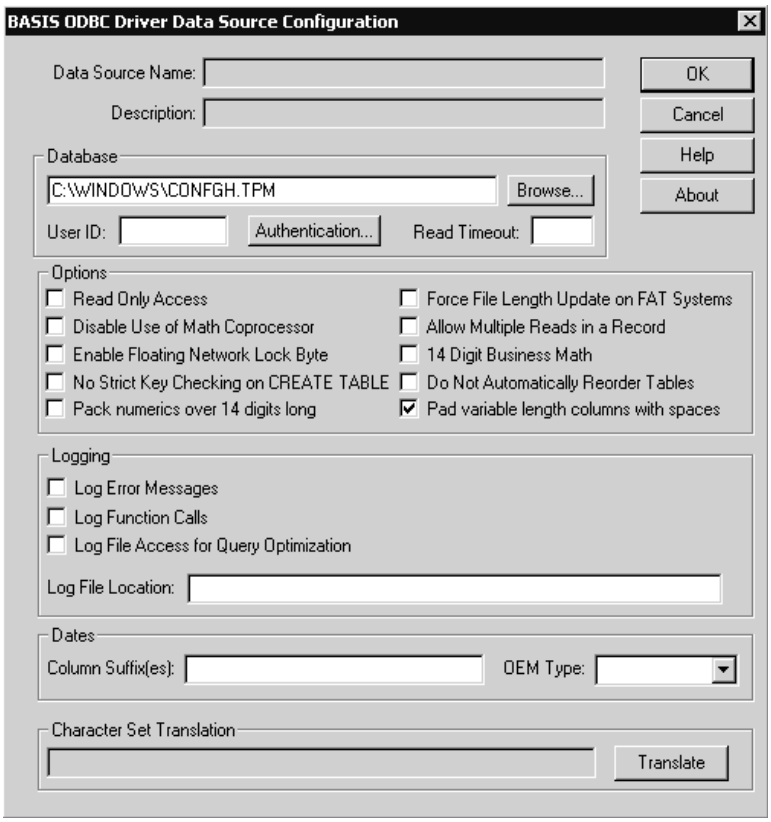


The last screen displays summary information about the type of data source, name and driver used to create the data source.

Click the Finished button if everything is correct.

Click the Back button if you need to edit any of the displayed information.

BASIS ODBC Driver Data Source Configuration Screen



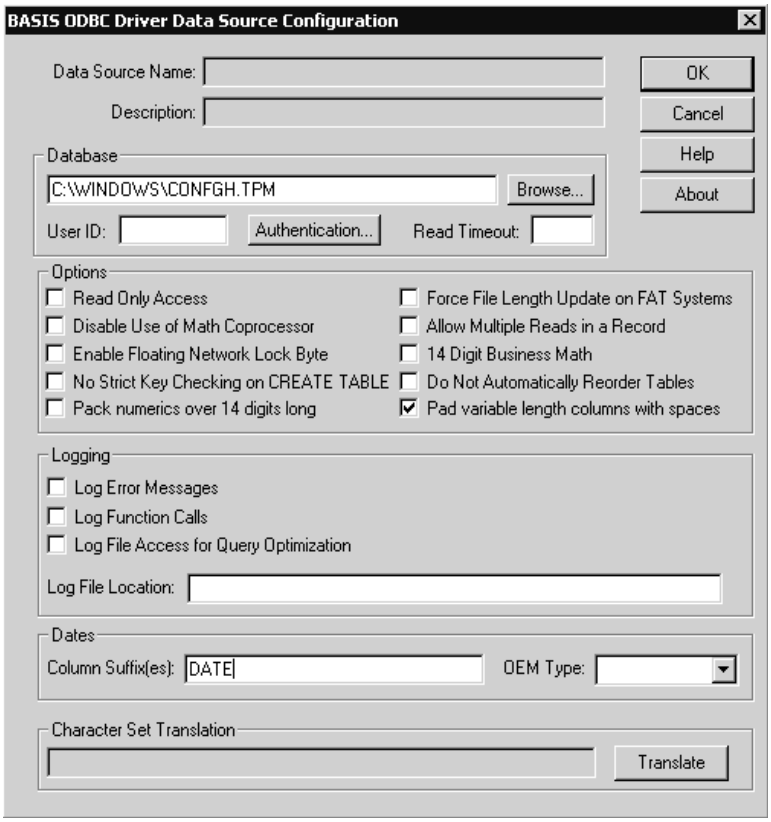
The BASIS ODBC Driver Data Source Configuration screen is displayed.

Enter information for the following fields:

Field	Description
Data Source Name	This field is unavailable with Excel and Query data sources.
Description	This field is unavailable with Excel and Query data sources.
Database	Enter the path and filename of the configuration file you created with the Edit CONFIG.TPM function. Use the Browse button to search for the file. The default location is the RWdata directory in OSAS.
User ID	If you are using a data server with OSAS, you must enter a valid network user ID to use with this data source file. If you do not enter a valid user ID, you will not be able to access your OSAS data stored on the data server. Root, Admin, Supervisor, and Administrator are not allowed.
Authentication	Click this button for secure data servers that require user authentication. You can enter a User ID, Password and Domain, to authenticate the user logging in, or an Authentication String.
Read Timeout	Enter a number between 0 and 255 to indicate the number of seconds to wait for a locked record to become available. The default is 10.

Option	Description
Read Only Access	Check this box if you are using the Read/Write version of the ODBC Drivers and you want this data source to allow read only access. Any changes made to the files are not allowed with read only access.
Disable Use of Math Coprocessor	Check this box, if you want to disable the use of the math coprocessor. On machines with math coprocessors, the ODBC Drivers may be able to use the coprocessor to enhance the speed and accuracy of the functions.
Enable Floating Network Lock Byte	Check this box to enable the older, slower file-locking scheme, which allows for standard access across the network.
No Strict Key Checking on CREATE TABLE	Check this box, if no primary key has been specified in the data files, creates a primary key using as many columns (fields) as can fit into the 120 character maximum key length. If this option is not select, then a primary key must be setup in each data file or errors will occur.
Pack numerics over 14 digits long	Check this box, if you have numeric values that are more then 14 digits to allow compression of these values into a pseudo-binary form to preserve disk space.
Force File Length Update on Fat Systems	Check this box to force MS-DOS to update the length of a dynamic file after any changes are made to the file.
Allow Multiple Reads in a Record	Check this box to allow multiple read processes to access the key of a keyed file.
14 Digit Business Math	Check this box to put the ODBC Drivers in a 14 digit Business Math mode. This forces keys and templates to use 14 digit Business Math precision.
Do Not Automatically Reorder Tables	The ODBC drivers may attempt to reorder the table if you are using a Select statement against multiple files, for optimization. Check this box, if you do not want the ODBC drivers to try to reorder the table.
Pad variable length columns with spaces	Check this option if you are using the Read/Write version of the ODBC Drivers, so that any updates you make to the OSAS files will be padded correctly.
Log Error Messages	Check this option to write any error messages generated by the ODBC Drivers to the log file entered in the Log File Location field.
Log Function Calls	Check this option1to write each ODBC API function call to the log file entered in the Log File Location field.
Log File Access for Query Optimization	Check this option to write each file system read to the log file entered in the Log File Location field.
Log File Location	Enter the path and filename for the log file. This file is used by the Log Error Messages, Log Function Calls, and Log File Access for Query Optimization options.

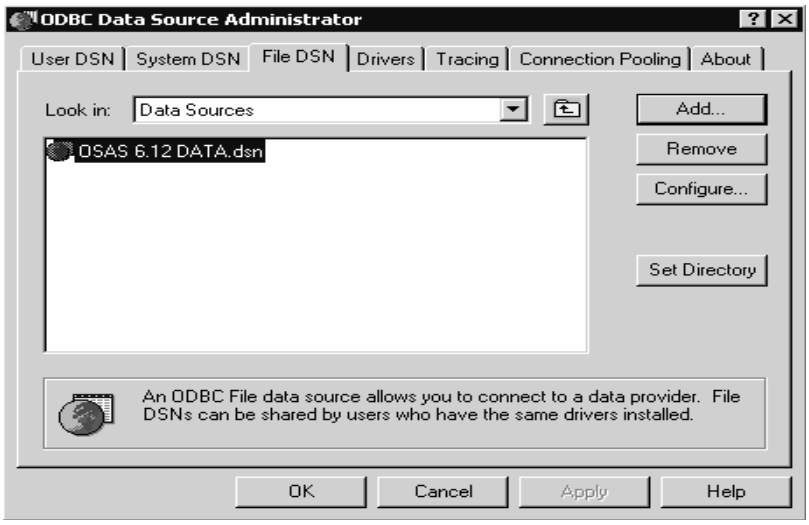
BASIS ODBC Driver Data Source Setup Screen



Dates Field	Description
Column Suffix(es)	Enter the suffix(es) of the columns that are to be converted to the OEM date type selected in the OEM Type field. More then one suffix can be entered. If more then one suffix is entered separate each with a comma.
OEM Types	By default, the numeric columns that end in the Date Column Suffix are treated as Julian Numbers and converted to SQL Dates. If you are using an OEM database that uses non-Julian numbers for the data format, select one of the OEM data types listed in the combo box to indicate your OEM date preference for columns ending in the Date Column Suffix.
Translation	Click this button to select the Microsoft Code Page Translator or other ODBC character translator.
Character Set Translation	The translator selected, if any, with the translation button is displayed.

Select the OK button to save the data source setup.

ODBC Data Source Administrator

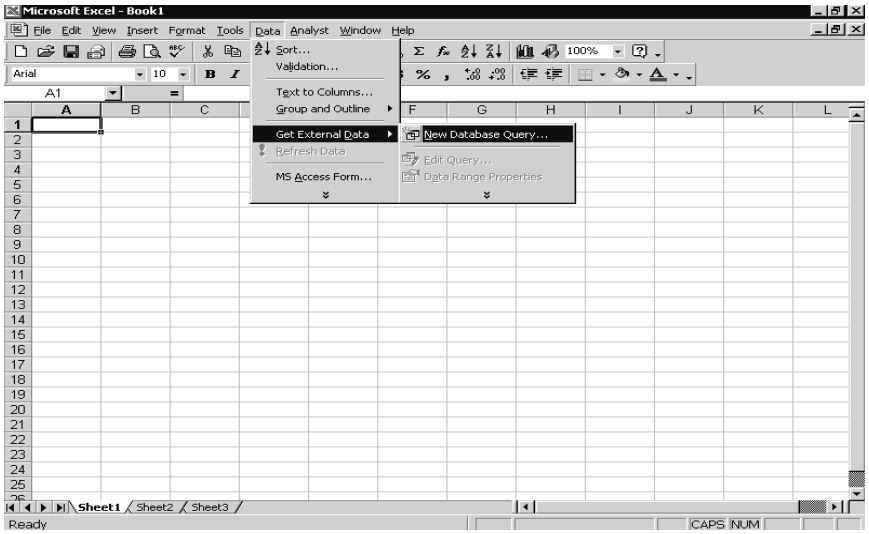


The data source is listed in the ODBC Administrator Box. Click OK to exit.

Basis ODBC 1.1 Drivers

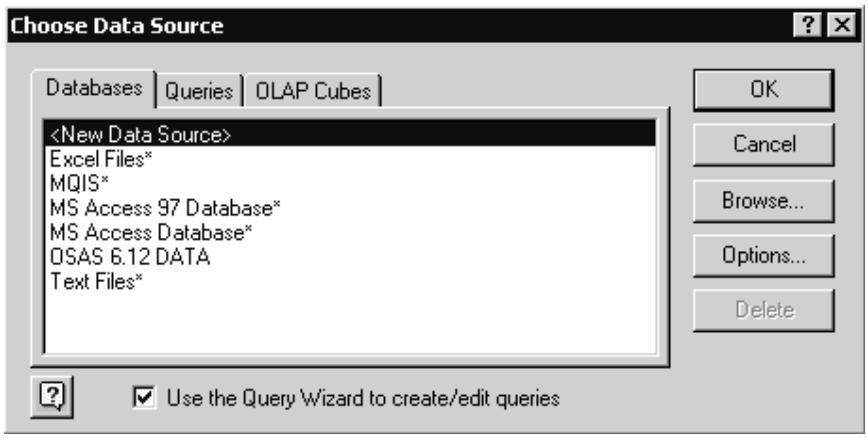
Using Excel/Query to create the data source

Get External Data – New Database Query Screen



Start Excel. From the Data menu select Get External Data followed by New Database Query[32].

Choose Data Source Screen



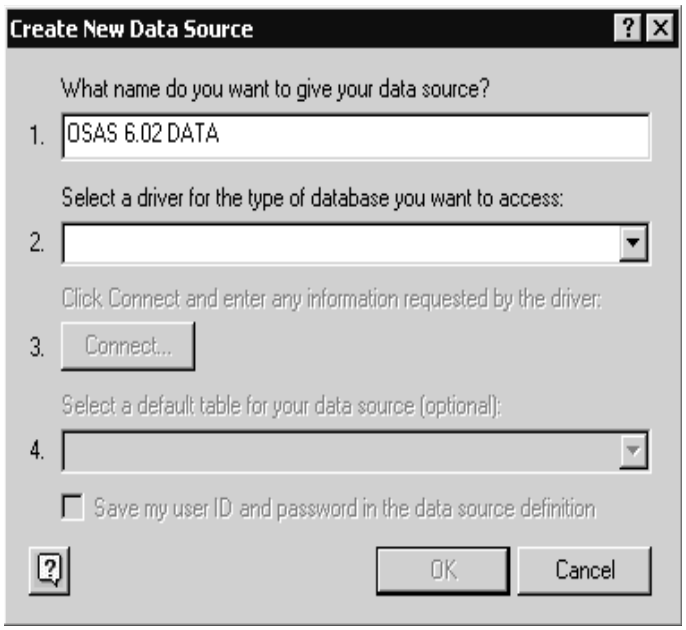
The Choose Data Source screen is displayed.

Select the data source you want to use for this query or choose <New Data Source> if the one you want to use is not listed.

Highlight <New Data Source> and select the OK button.

32. With Excel 97 select Get External Data followed by Create New query. With Excel 2002 select Import External Data followed by New Database Query.

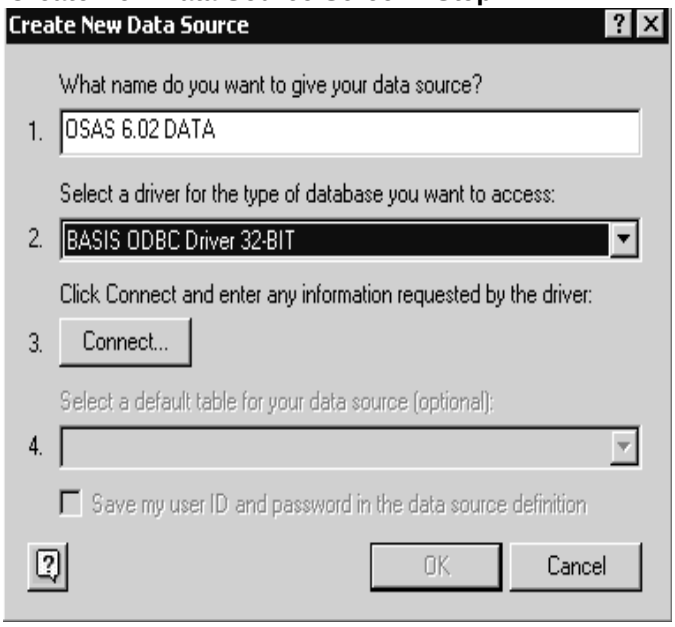
Create New Data Source Screen - Step 1



The Create New Data Source screen is displayed.

1. Enter a name for the data source you are creating. The data source name can be anything you like.

Create New Data Source Screen - Step 2

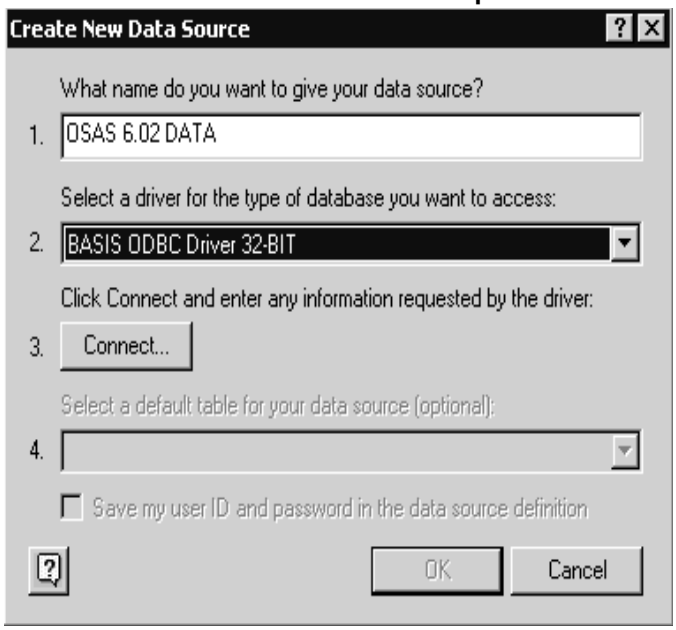


2. Select the driver for the database you want to access.

   For the OSAS data files, select the BASIS ODBC Driver 32 Bit[33]

33. If you are using the 2.3 or 3.0 version of the ODBC Drivers, select BASIS ODBC Driver.

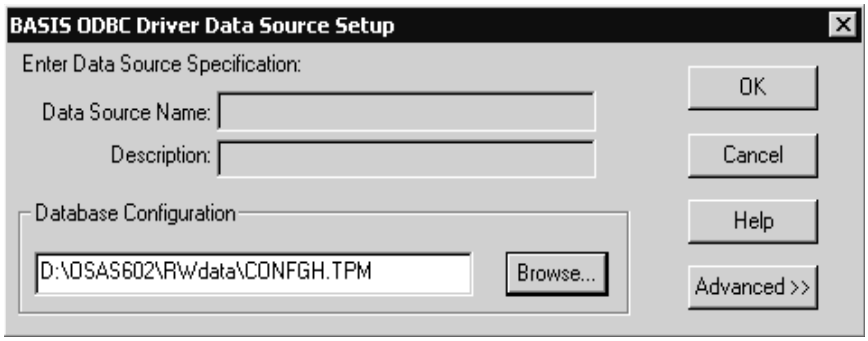
Create New Data Source Screen - Step 3



3. Connect to the data source configuration file.

Click the Connect button.

BASIS ODBC Driver Data Source Setup Screen



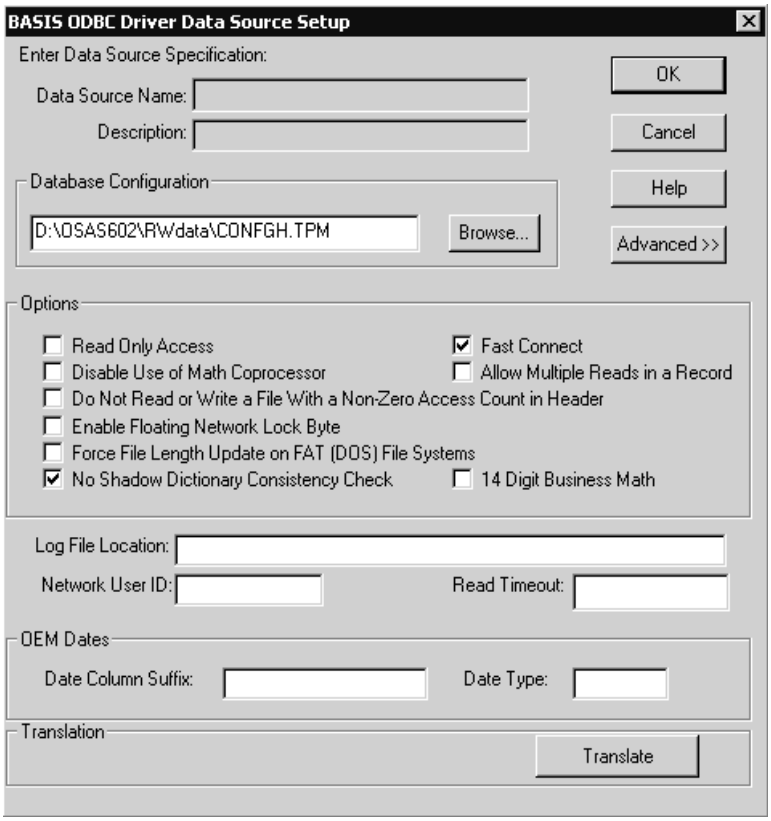
The BASIS ODBC Driver Data Source Configuration screen is displayed.

Enter information for the following fields:

Field	Description
Data Source Name	This field is unavailable with Excel and Query data sources.
Description	This field is unavailable with Excel and Query data sources.
Database	Enter the path and filename of the configuration file you created with the Edit CONFIG.TPM function. Use the Browse button to search for the file. The default location is the RWdata directory in OSAS.

Select the Advanced button.

Basis ODBC Driver Data Source Setup Screen

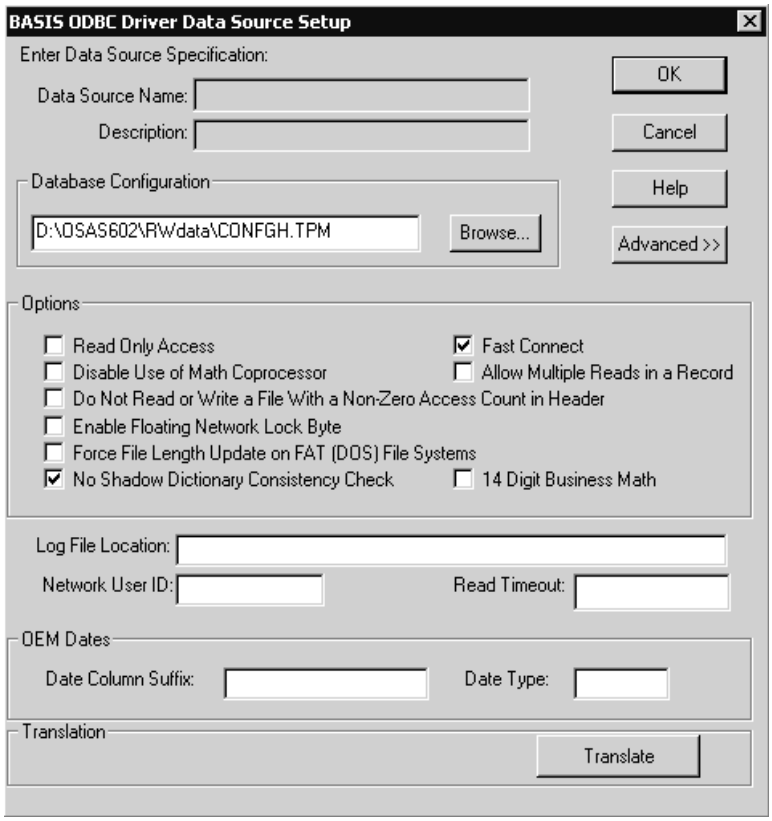


The Options section is displayed.

Enter information for the following options:

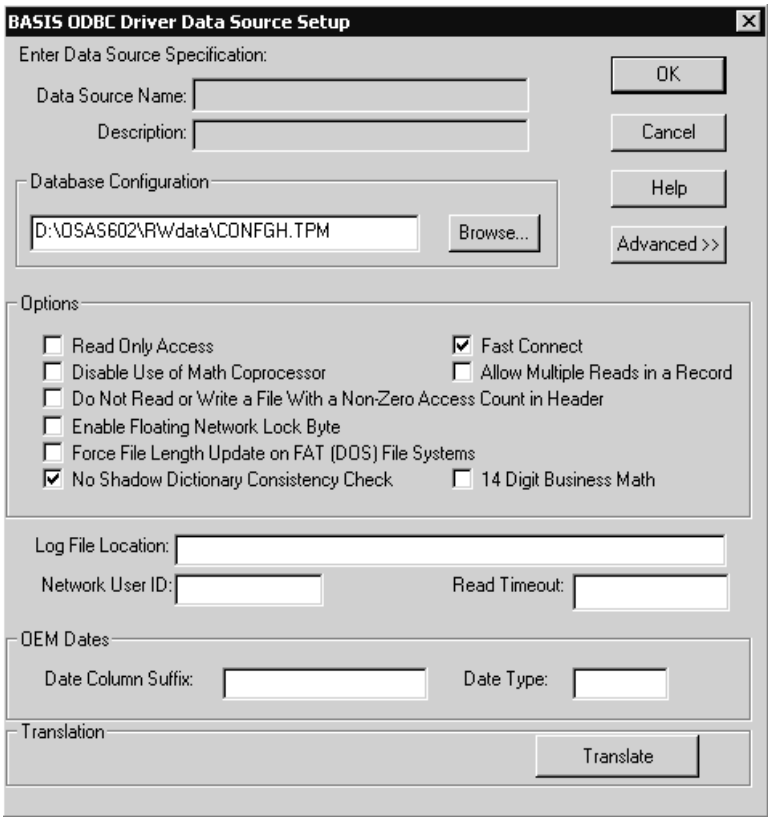
Option	Description
Read Only Access	Check this box if you are using the Read/Write version of the ODBC Drivers and you want this data source to allow read only access. Any changes made to the files are not allowed with read only access.
Disable Use of Math Coprocessor	Check this box, if you want to disable the use of the math coprocessor. On machines with math coprocessors, the ODBC Drivers may be able to use the coprocessor to enhance the speed and accuracy of the functions.
Do Not Read or Write a File With Non-Zero Access Count in Header	Check this box if you want to prevent the access of a file that has a non-zero access count stored in the header of the file. A non-zero count may indicate a damaged file.
Enable Floating Network Lock Byte	Check this box to enable the older, slower file-locking scheme, which allows for standard access across the network.
Force File Length Update on Fat (DOS) File Systems	Check this box to force MS-DOS to update the length of a dynamic file after any changes are made to the file.

Basis ODBC Driver Data Source Setup Screen



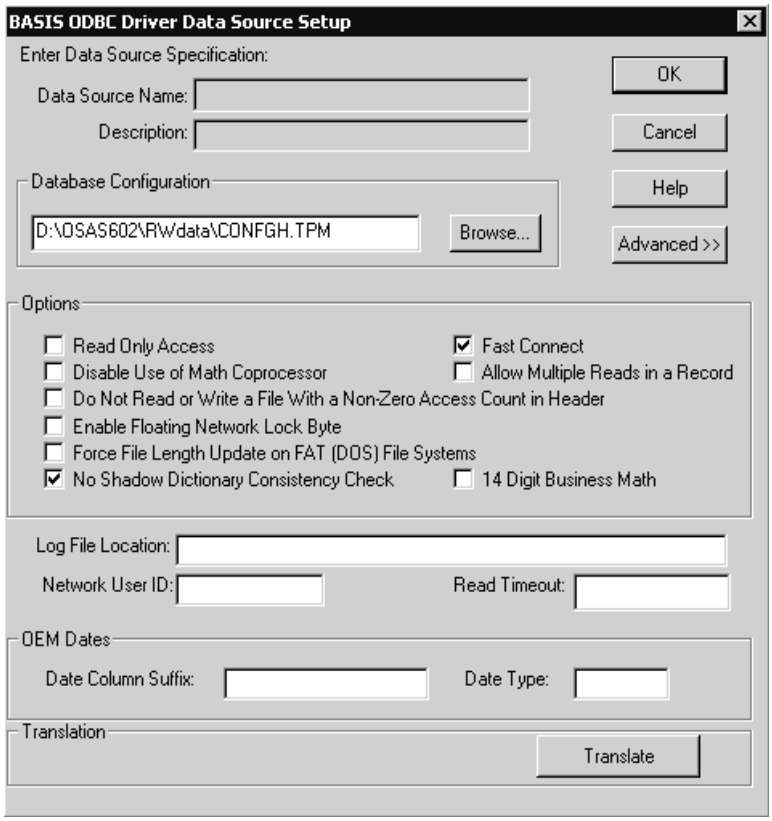
Option	Description
No Shadow Dictionary Consistency Check	Check this box to prevent a Shadow Consistency check at connection time. This option will allow you to make faster connections to your OSAS data.
Fast Connect	Check this box to allow for the fastest connection to the OSAS data. This option is required if you are using the 1.1 version of the ODBC Drivers.
Allow Multiple Reads in a Record	Check this box to allow multiple read processes to access the key of a keyed file.

Basis ODBC Driver Data Source Setup Screen



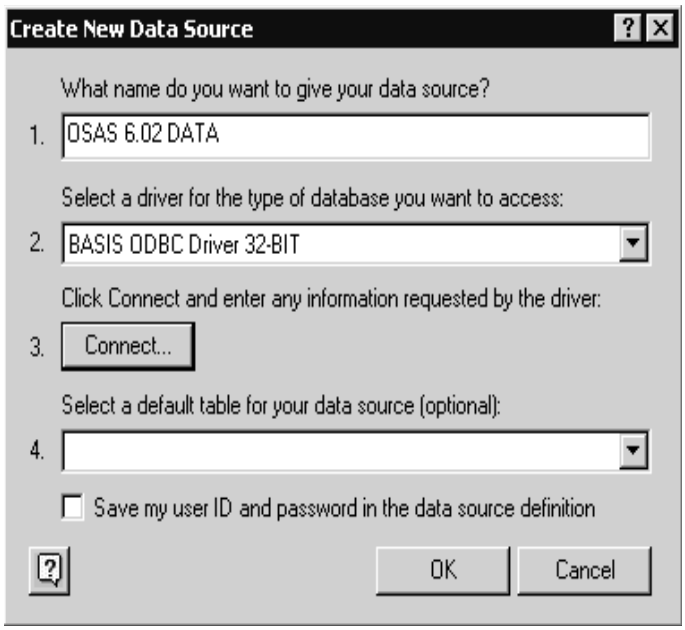
Field	Description
Log File Location	Enter the path and filename for the log file. This file is used by the Log Error Messages, Log Function Calls, and Log File Access for Query Optimization options.
Network User ID	If you are using a data server with OSAS, you must enter a valid network user ID to use with this data source file. If you do not enter a valid user ID, you will not be able to access your OSAS data stored on the data server. Root, Admin, Supervisor, and Administrator are not allowed.
Read Timeout	Enter a number between 0 and 255 to indicate the number of seconds to wait for a locked record to become available. The default is 10.

Basis ODBC Driver Data Source Setup Screen



Field	Description
Date Column Suffix	Enter the suffix(es) of the columns that are to be converted to the OEM date type selected in the OEM Type field. More then one suffix can be entered. If more then one suffix is entered separate each with a comma.
Date Types	By default, the numeric columns that end in the Date Column Suffix are treated as Julian Numbers and converted to SQL Dates. If you are using an OEM database that uses non-Julian numbers for the data format, select one of the OEM data types listed in the combo box to indicate your OEM date preference for columns ending in the Date Column Suffix.
Translate	Click this button to select the Microsoft Code Page Translator or other ODBC character translator.
Translation	The translator selected, if any, with the translate button is displayed.

Create New Data Source – Step 4



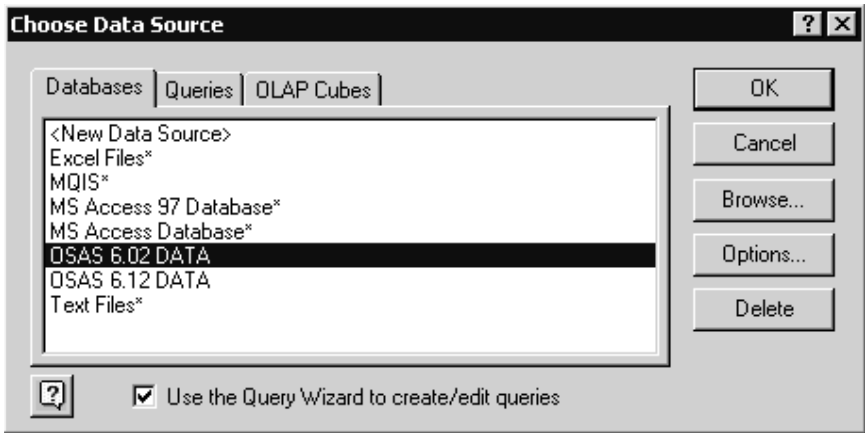
The Create New Data Screen is re-displayed.

4. Select an optional table for your data source. This table is selected by default, whenever you use this data source, but you can always select any table available.

   You can also save your user Id and Password with this data source.

Click OK when finished.

Choose Data Source Screen

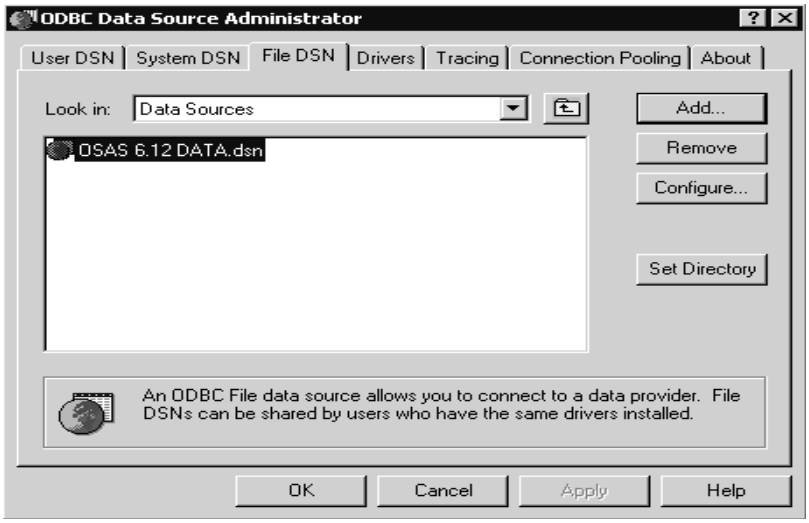


The Choose Data Source screen is re-displayed.

Place a check in the Use the Query Wizard to create/edit queries field, highlight the data source created and click OK.

Using the ODBC Administrator to create the data source

ODBC Data Source Administrator



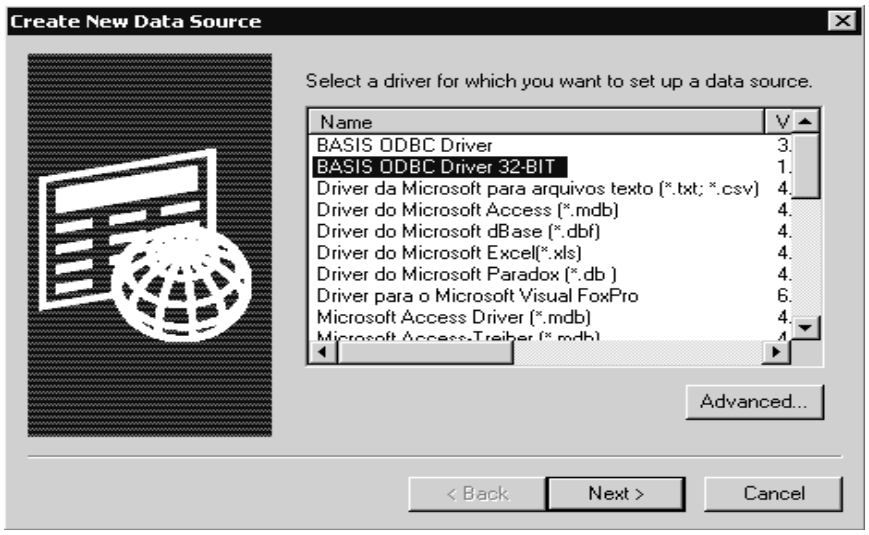
Create a Data Source with the 32-bit ODBC Administrator in the control panel.

Option	Description
User DSN	Creates a data source for this machine that only the user creating it can access.
System DSN	Creates a data source for this machine that anyone who uses this machine can access.
File DSN	Creates a data source that can be shared by users who have the same drivers installed.
Drivers	Displays the list of installed ODBC Drivers.
Tracing	Creates a log file of calls made to the ODBC Drivers. This can be used to aid support and debug your applications.
Connection Pooling	Allows applications to reuse open connection handles, which saves round-trips to the server.

Select File DSN for use with Excel and Query

Click the Add button to create the new data source.

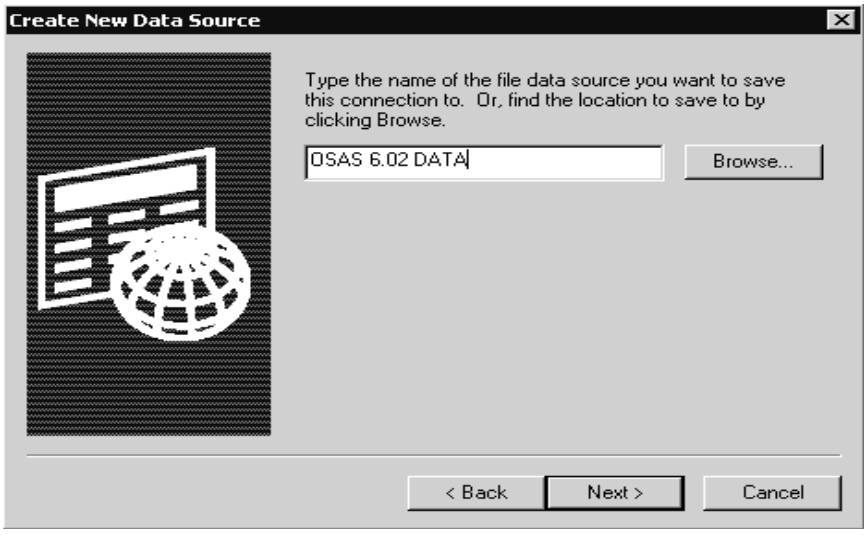
Create New Data Source



The Create New Data Source screen is displayed select the Basis ODBC Driver.

Select the Next button.

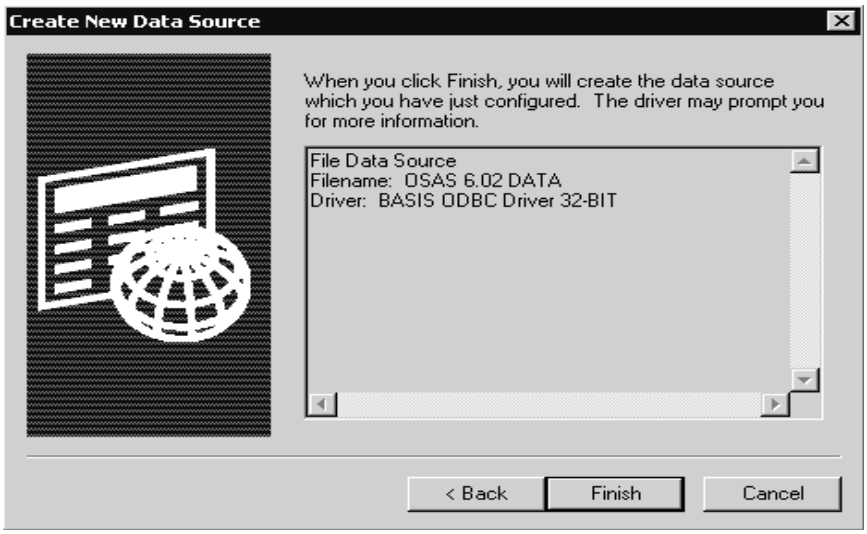
Create New Data Source



Enter a name for the data source or browse to an existing data source.

Click the Next button.

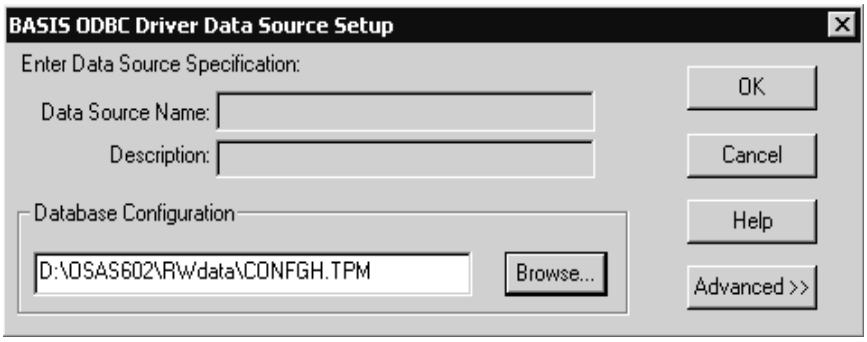
Create New Data Source



The last screen displays summary information about the type of data source, name and driver used to create the data source.

Click the Finished button if everything is correct or click the Back button if you need to edit any of the displayed information.

BASIS ODBC Driver Data Source Setup Screen



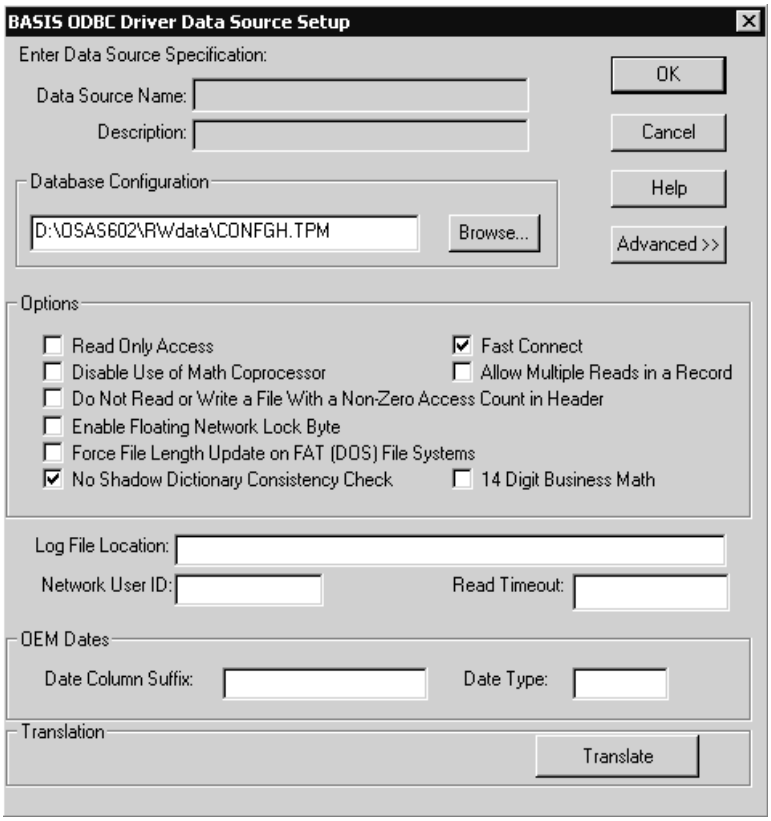
The BASIS ODBC Driver Data Source Configuration screen is displayed.

Enter information for the following fields:

Field	Description
Data Source Name	This field is unavailable with Excel and Query data sources.
Description	This field is unavailable with Excel and Query data sources.
Database	Enter the path and filename of the configuration file you created with the Edit CONFIG.TPM function. Use the Browse button to search for the file. The default location is the RWdata directory in OSAS.

Select the Advanced button.

Basis ODBC Driver Data Source Setup Screen



The Options section is displayed.

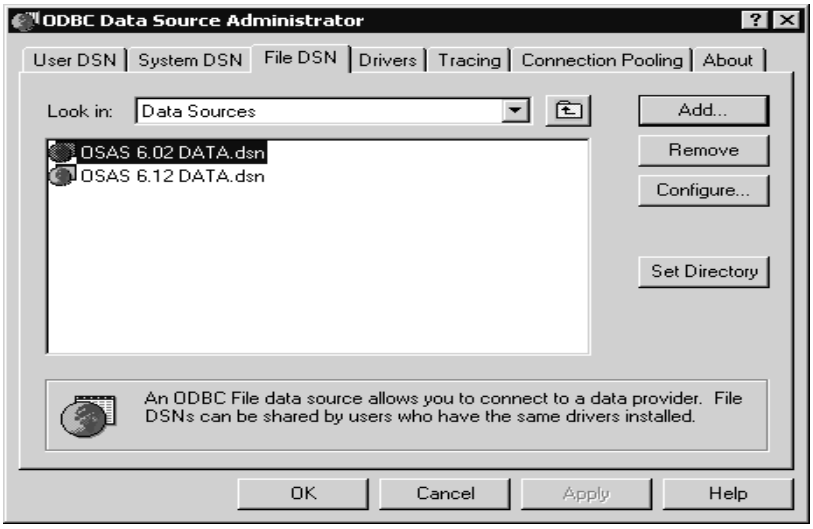
Enter information for the following options:

Option	Description
Read Only Access	Check this box if you are using the Read/Write version of the ODBC Drivers and you want this data source to allow read only access. Any changes made to the files are not allowed with read only access.
Disable Use of Math Coprocessor	Check this box, if you want to disable the use of the math coprocessor. On machines with math coprocessors, the ODBC Drivers may be able to use the coprocessor to enhance the speed and accuracy of the functions.
Do Not Read or Write a File With Non-Zero Access Count in Header	Check this box if you want to prevent the access of a file that has a non-zero access count stored in the header of the file. A non-zero count may indicate a damaged file.
Enable Floating Network Lock Byte	Check this box to enable the older, slower file-locking scheme, which allows for standard access across the network.

Option	Description
Force File Length Update on Fat (DOS) File Systems	Check this box to force MS-DOS to update the length of a dynamic file after any changes are made to the file.
Fast Connect	Check this box to allow for the fastest connection to the OSAS data. **This option is required if you are using the 1.1 version of the ODBC Drivers.**
Allow Multiple Reads in a Record	Check this box to allow multiple read processes to access the key of a keyed file.
Log File Location	Enter the path and filename for the log file. This file is used by the Log Error Messages, Log Function Calls, and Log File Access for Query Optimization options.
Network User ID	If you are using a data server with OSAS, you must enter a valid network user ID to use with this data source file. If you do not enter a valid user ID, you will not be able to access your OSAS data stored on the data server. Root, Admin, Supervisor, and Administrator are not allowed.
Read Timeout	Enter a number between 0 and 255 to indicate the number of seconds to wait for a locked record to become available. The default is 10.
Date Column Suffix	Enter the suffix(es) of the columns that are to be converted to the OEM date type selected in the OEM Type field. More then one suffix can be entered. If more then one suffix is entered separate each with a comma.
Date Types	By default, the numeric columns that end in the Date Column Suffix are treated as Julian Numbers and converted to SQL Dates. If you are using an OEM database that uses non-Julian numbers for the data format, select one of the OEM data types listed in the combo box to indicate your OEM date preference for columns ending in the Date Column Suffix.
Translate	Click this button to select the Microsoft Code Page Translator or other ODBC character translator.
Translation	The translator selected, if any, with the translate button is displayed.

Select the OK button to save the data source setup.

ODBC Data Source Administrator



The data source is listed in the ODBC Administrator Box. Click OK to exit