Standard & Poor's
Research Insight
Beyond Basics

With Standard & Poor's COMPUSTAT Data

Standard & Poor's

A Division of The McGraw-Hill Companies

Standard & Poor's
7400 South Alton Court
Englewood, CO 80112 - 2394

Call Customer Support toll free in the U.S. and Canada **800.523.4534**
Clients in Mexico call **01 800 288 2872,** after the prompt dial **800.523.4534**
International Clients **44.20.7826.8580**

3/2002v7.8

Table of Contents

Chapter 1
Welcome to Beyond Basics

As a current user of Standard & Poor's Research Insight[SM], you know how much reliable, insightful financial information this powerful analytic software delivers. By now you've become familiar with the basic functions of the software, including the numerous pre-defined company reports and charts it contains.

This manual shows you how to add your own data to Research Insight and create your own databases with the Research Insight Database Management System. This manual also describes how to incorporate data from subscription databases and the Value Added data download.

This manual will introduce you to the advanced features of Research Insight; it is an appropriate resource if you are

- an experienced Research Insight user
- well-versed with the content of *Standard & Poor's Research Insight - Getting Started*
- interested in incorporating your own information into Research Insight
- interested in incorporating additional COMPUSTAT® databases into Research Insight

The Database Management System

The Standard & Poor's Research Insight Database Management System is designed to be the single, integrated solution to your financial analysis needs—a system offering unparalleled flexibility.

Access our diverse subscription databases including Daily Market Data, Daily Fundamental updates, COMPUSTAT (Classic), Earnings, Cash Flow and Revenue Estimates (additional subscriptions required).

Incorporate Index Fundamental data, Economic and Sector data, Insider Trading and Institutional Ownership data, Business Descriptions and more in the Value Added Data download (included in the basic subscription).

Integrate your own proprietary information and/or create your own databases for further depth.

Adding Your Own Data to Research Insight

Research Insight makes it easy to integrate your own information, whether on a small or large scale. You can add a single company to the system, or you can add your own specialized data item and import values for 5,000 companies.

Here are a few examples of the flexibility of the Research Insight Database Management System:

- Add and define your own specialized data items
- Change data values and add forecasting values into the future
- Add one or more companies not available in your subscription database
- Add segment information to a company
- Add a secondary stock issue and the corresponding market data to a company
- Import a large ASCII file of data values
- Export concepts to share with colleagues
- Redefine a concept or add your own new concept
- Add a currency to the Global database
- Create one or more of your own custom databases
- Share your own custom databases on a network

Additional Resources

For a basic understanding of Research Insight, refer to the *Standard & Poor's Research Insight - Getting Started* manual, a step-by-step guide to Research Insight. Getting Started is available in both North America and Global versions.

The *Standard & Poor's Research Insight Report and Chart Library* offers a visual guide to the pre-defined reports and charts available in Research Insight. Also available in North America and Global versions.

On-line help provides you with step-by-step instructions for every powerful feature of Research Insight and comprehensive definitions for every data item in the COMPUSTAT (North America) and COMPUSTAT (Global) databases.

Visit our web site at **http://support.compustat.com** for additional resources.

Customer Support

Our highly-trained team of professionals can assist you with any questions or concerns about your subscription to Research Insight.

Telephone

The toll-free number for U.S. and Canadian clients is **800.523.4534** between 6:00 a.m. and 6:00 p.m. (MST), Monday through Friday.

In Mexico, dial **01.800.288.2872**, after the prompt dial **800.523.4534**.

International clients can call **44.20.7826.8580** between 9:00 a.m. and 5:30 p.m. (GMT).

Email

Email the Customer Support center at clientsupport@standardandpoors.com.

Chapter 2
Adding Data Items

There are hundreds of available data items in Standard & Poor's Research Insight covering a wide array of fundamental financial and market information. From time to time, however, you may want to add a unique item to meet your particular needs.

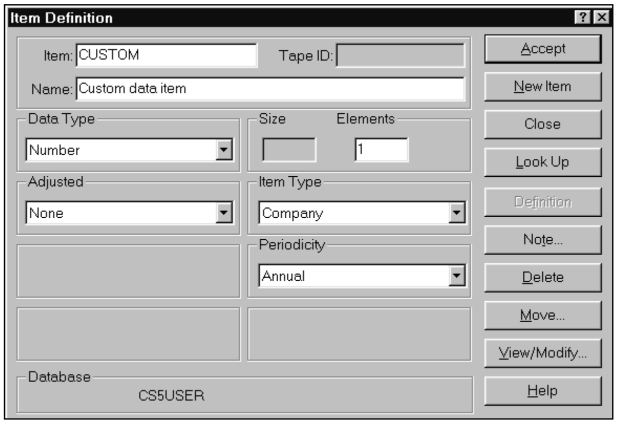
This chapter covers

- creating your own data item
- viewing your item with the Look Up List
- assigning data values to your data item
- deleting your data item
- moving your data item to another database

Creating Your Own Data Item

To add a new data item to Research Insight, you must select a name for the item, define its characteristics and assign values. To create a new data item, begin from the Research Insight desktop.

1. From the **Databases** menu, select **Item**.
   You will see the Item Definition dialog box.



Select a Name and Mnemonic for Your Data Item

2. Enter an abbreviated name, or mnemonic, for your item in the **Item** field.
   Try to use a mnemonic that is meaningful to you and anyone else who will use it. Once added, you can use this name and mnemonic to find the item in the Research Insight Look Up List.
3. Click the **Edit** button.
   Research Insight checks to see if this item already exists in the dictionary of data items for the active Database Group. The dictionary contains all Research Insight defined items and any items you have previously added. If your data item does not already exist, you are asked if you want to add the item to the data dictionary.
4. Click **OK**.
   Notice that the **Edit** button changes to the **Accept** button.
5. Enter the name of your item in the **Name** field.
   At this point, you are ready to define the characteristics of your data item. Keep the Item Definition dialog box open and proceed to the next step to choose a data format for your item.

Choose a Data Format

Use the Data Type field in the Item Definition dialog box to establish the format in which your item is entered and displayed in Research Insight, and to determine how the item can be used in formulas and concepts. The following options are available:

Option	Definition
Number	Decimal items up to 20 characters long. The decimal point counts as a character. Research Insight displays most numbers to three decimal places.
Integer	Any whole number. For example, the item EMP (Employees) is an integer.
Character	Text, including keyboard symbols, presented in any order, up to 60 characters long. An example of the data item CONM (Company Name) is Microsoft Corp. Another common example of a character data item is the footnote. For example, for the item SALEF (Sales Footnote), AC = Reflects an Accounting Change and AZ = Excludes Discontinued Operations.
Period	Items referencing a point in time, either Annual, Quarterly, Monthly, Weekly, or Daily. For example, for the item CPD (Current Period Date - Annual) CPD = Y01.
Date	Dates represent calendar dates including month, day and year, or a month and year. Dates appear as MM/DD/YY. For example, for the item RDQ (Reported Date of Quarterly EPS), RDQ = 3/31/01.

Select an Adjustment Method for Per-Share Items

Use the Adjusted field to automatically adjust per-share items (such as prices, dividends and earnings per share) and share items (such as common shares outstanding) for stock splits, stock dividends and other capital changes. The following options are available:

COMPUSTAT (North America)

Option	Definition
None	No adjustment for capital changes.
as Common Share Items	Multiplies common share items by the appropriate adjustment factor. For example, CSHO (Common Shares Outstanding) multiplied by AJEX (Adjustment Factor (Company) - Cumulative by Ex-date).
as Per Share	Divides per share items by the appropriate adjustment factor. For example, PRCCM (Price-Close Monthly) divided by AJEXM (Adjustment Factor (Company) - Cumulative by Ex-date Monthly).

Option	Definition
as Rstd Com Share Items	Multiplies restated common share items by the appropriate adjustment factor. For example, CSHPRR (Common Shares for Basic EPS - Restated) multiplied by AJEX (Adjustment Factor (Company)-Cumulative by Ex-date).
as Rstd Per Share Items	Divides restated per share items by the appropriate adjustment factor. For example, EPSFIR (EPS Diluted Including Extra Items Restated) divided by AJEXM (Adjustment Factor (Company) - Cumulative by Ex-date - Monthly).
during Calculate Data	Adjusts per-share item data during the calculation process. Use this option only if you are assigning or editing data values where the values are calculated from existing items, concepts, and values.

COMPUSTAT (Global)

Option	Definition
None	No adjustment for capital changes.
as Common Share General Method	Multiplies common share items by the appropriate adjustment factor. For example, CSHO (Common Shares Outstanding) multiplied by AJPI1 (Issue Adjustment Factor (Annual) Cumulative - Paydate - General).
as Per Share General Method	Divides per share items by the appropriate adjustment factor. For example, PRCCM (Price-Close Monthly) divided by AJPI2 (Issue Adjustment Factor(Annual) Cumulative - Paydate - Shr).
as Com Share Shares Method	Multiplies common share items by the appropriate adjustment factor and looks at the footnote ISTAT (Comparability Status-Issue) to see if the distribution occurred in another issue. For example, CSHO (Common Shares Outstanding) multiplied by AJPI1 (Issue Adjustment Factor (Annual)Cumulative - Paydate - Gen).
as Per Share Shares Method	Divides per share items by the appropriate adjustment factor and looks at the footnote ISTAT (Comparability Status-Issue) to see if the distribution occurred in another issue. For example, PRCCM (Price-Close Monthly) divided by AJPI2 (Issue Adjustment Factor (Annual)-Cumulative - Paydate - Shr).
during Calculate Data	Adjusts per-share item data during the calculation process. Use this option only if you are assigning or editing data values where the values are calculated from existing items, concepts and values.

Define the Number of Characters

Use the Size field for items of “character” data type, where the size defines the number of characters. For example, footnotes are two-character codes that represent additional information about an item. If you are adding your own footnote item, enter **2** in the **Size** field.

Define How Many Values an Item May Have

Use the Elements field to identify the number of values a company can have for the item per period. Most items only have one value for the period, e.g., annual Net Sales is a single element item because companies report only one annual sales figure each year.

Some items have multiple data values per period. For example, many companies use a number of different inventory methods simultaneously. The Inventory Valuation Method data item (INVVAL) accepts up to four inventory methods per year for a single company. To define a multiple-element data item, replace the default value of **1** in the **Elements** field with the necessary number of elements.

Select a Category for the Item

Research Insight Databases are broken down into categories that have financial and/or market data. The most notable category is the company. Other categories that have financial and/or market data include segments, stock issues, and currencies. Use the Item Type field to include your item in one of these categories. The following options are available:

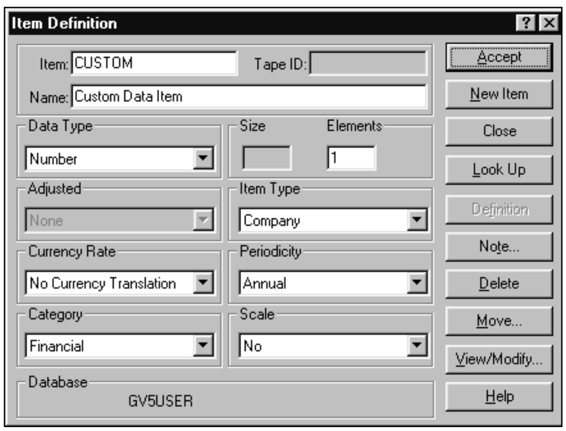
Option	Definition
Company	A publicly held corporation that trades common stock, or a wholly owned subsidiary that trades preferred stock and/or debt.
Business	A business segment or industry segment of a company that reports its financial results. Research Insight can contain up to 10 business segments per company per year. Segment data, both business and geographic, is generally reported in the notes of the financial statements.
Geographic	A geographic segment of a company that reports its financial results. Research Insight can contain up to 5 geographic segments per company per year, and each segment can have up to 5 geographic areas.
Issue	A stock security traded on a public exchange or by security brokers. Most companies have only one issue currently trading. However, some companies have multiple stock issues.
Currency	The COMPUSTAT (Global) database contains more than 110 currencies. All Global data is stored in native or as-reported currency units. Each currency can be translated into the other currencies in the database.

Specify How Often the Item is Reported

Use the Periodicity field to define how often the item is reported. Each item can have only one periodicity. If you are adding an item that is reported both annually and quarterly, such as Net Sales (SALE and SALEQ) you will need to create two separate items with unique mnemonics. Research Insight provides the following options:

Option	Definition
Annual	A data item reported on a yearly basis.
Quarterly	A data item reported on a quarterly basis.
Monthly	A data item reported on a monthly basis.
Weekly	A data item reported on a weekly basis.
Daily	A data item reported on a daily basis.
Scalar	Scalar data items are not related to periods of time. Scalar items include company names, addresses or calculations like growth rates.

If you are working with the COMPUSTAT (Global) database, the Item Definition dialog box contains three additional fields: Currency Rate, Category and Scale. These fields are shown below:



Specify the Type of Exchange Rate

Use the Currency Rate field to specify the type of exchange rate that you want Research Insight to use for your data item. The Global database contains four types of translation rates for each currency. Use them as follows:

Option	Definition
No Currency Translation	Use this option for any number that you do not want translated.

Option	Definition
Month End Rate	Use this rate option for a point in time item, such as a Balance Sheet item.
Month End Average Rate	Use this option for certain market items, such as monthly high and low prices.
12 Month Moving Avg Rate	Use this option for flow items, such as Income Statement or Statement of Cash Flow items.

Select Either the Financial or Market Category

Data items in the Global database are categorized as either Financial or Market items, because data can be reported in different currencies for one company. For example, revenues—a financial item—may be reported in one currency, and the stock price—a market item—may trade in another. Use them as follows:

Option	Definition
Financial	Financial data includes sales, income, assets, etc.
Market	Market data includes monthly high and low prices, etc.

Specify How Data Values are Scaled

The Currency Units of Representation can be scaled in either millions or billions of units. Selecting **Yes** in the **Scale** field means that the values Research Insight displays for your data item are scaled according to the currency in use. For example, Japanese Yen are scaled to billions, so if the value displayed for a Japanese company is 100, this means 100 billion Yen.

Selecting **No** in this field means that the values Research Insight displays for your data item are as reported. You would select **No** for a data item such as Employees (EMP).

Add a Note to Your Data Item

You may find it useful to include a description or definition about your data item for future reference. Or if you modify the item, you might want to keep of log of your modifications.

Begin from the Item Definition dialog box:

1. Click the **Note** button.
   The Note dialog box displays.
2. Enter your note at the cursor.
3. Once you are finished, click **OK**.
4. Click **Accept** in the Item Definition dialog box to save your note.

To edit an existing note, acces the Note dialog box and type over what you have previously written. Click **OK**. To save your changes, make sure that you select the **Accept** button in the Item Definition dialog box.

Viewing Your Data Item in the Look Up List

Research Insight lists your data item name and mnemonic alphabetically in the **All** category of the **Look Up** list with all of the other data items in the active Database Group. You can also select the **User** category to view only those items and concepts that you have added.

Assigning Values to Your Data Item

Once you have added a new data item and defined its characteristics, you will want to add data values for that item to companies, segments, issues or currencies. Research Insight provides you with three ways of doing this:

- Manually entering data values
- Calculating data values from existing data
- Importing data from an ASCII file

For a complete explanation of assigning values to a data item, refer to Chapter 3 - Editing and Assigning Data Values.

Deleting Your Data Item

Once you decide that you have no further need for a data item that you have created, you can delete it along with all of its associated data values. To delete only the associated data values, and not the data item definition, refer to Chapter 3 - Editing and Assigning Data Values. Use the following steps to delete an item and all of its associated values.

Begin from the Research Insight desktop:

1. From the **Databases** menu, select **Item**.
2. Enter the mnemonic for your item in the **Item** field.
3. Click the **Edit** button.
4. Click the **Delete** button.
   You will be asked if you want to delete the item and all of its associated data.
5. Click **OK**.
   Your data item and the associated data values are deleted.

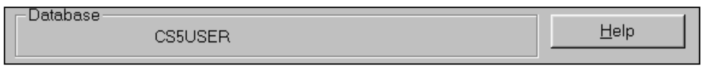
Note: Research Insight won't let you permanently delete a COMPUSTAT data item or any of its associated data values. You can replace the data values with your own, but you always have the option of restoring the values that Research Insight displays to the core database values.

Moving Your Data Item to Another Database

When you create a new data item, Research Insight stores the item in a write-to database, rather than in the COMPUSTAT North America or Global core databases. There are two write-to databases associated with the core databases in Research Insight.

	Write-to Database
COMPUSTAT (North America)	CS5USER
COMPUSTAT (Global)	GV5USER

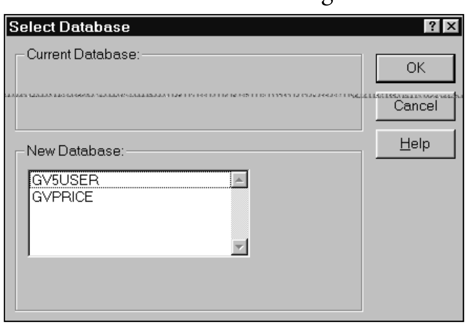
The Database area at the bottom of the Item Definition dialog box indicates where the data item you created will be stored.



Or, you may decide to store data items you created in your own database. For more information on creating your own databases, refer to Chapter 10 - Managing Your Databases. The example below shows you how to select the database where you want to store your data items.

Begin from the Research Insight desktop:

1. From the **Databases** menu, select **Item**.
   You will see the Item Definition dialog box.
2. Enter the mnemonic for your item in the Item field and click the **Edit** button.
   Research Insight activates all of the fields in the Item Definition dialog box.
3. Click the **Move** button.
   You will see the Database dialog box. All of the available write-to databases are listed here.



4. Select the new, write-to database where you want to save your data item.
5. Click **OK**.
   Notice that the new database is identified at the bottom of the Item Definition dialog box.
6. Click the **Accept** button in the Item Definition dialog box to save your changes.
   Keep in mind that you can only have one active write-to database at a time.

Chapter 3
Editing and Assigning Data Values

Customized data items are powerful tools for forecasting and for creating "what if" scenarios. With Standard & Poor's Research Insight, you can assign data values for items you have added, and edit or change any existing Research Insight data value for historical, current and future time periods. You can restore the original data values of Research Insight items you have changed. You can also import data from an Excel spreadsheet into Research Insight.

This chapter covers

- assigning data values
- importing data from Excel into Research Insight
- editing data values and adding data values into the future
- restoring original data values

Assigning Data Values

There are two ways to enter data values: you can either enter the values manually, or have Research Insight calculate values based on existing items and concepts. Since the most common data item type is the company data item, the sections that follow are based on adding values for company data items. Follow the same basic procedures to add segment, issue and currency data items.

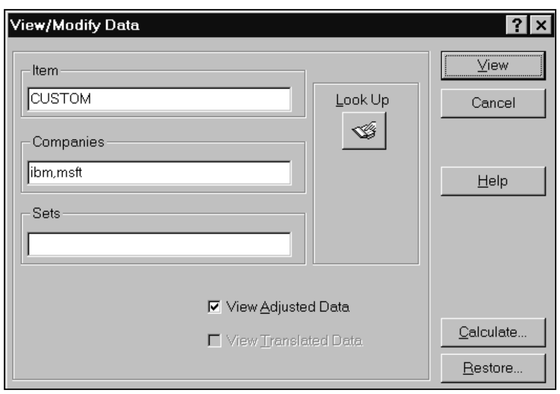
Manually Entering Data Values

If you are assigning or editing data values for a limited number of companies, you can simply enter the values into Research Insight.

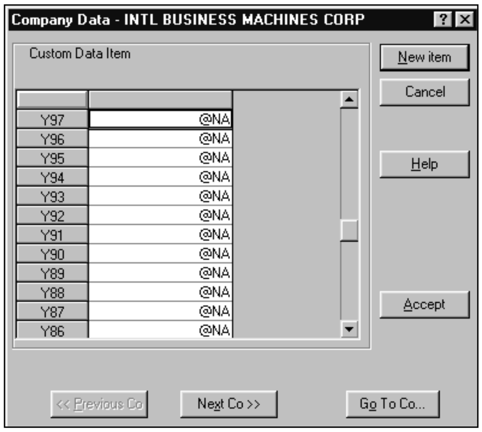
The following example shows you how to add data values for a data item in the COMPUSTAT (North America) database with the mnemonic CUSTOM. The values are added to two companies, IBM and Microsoft Corp.

Begin from the Research Insight desktop:

1. From the **Databases** menu, select **View/Modify Data** to display the View/Modify Data dialog box.
2. Enter the item mnemonic in the **Item** field.
3. Enter the company tickers (**ibm,msft**) in the **Companies** field. When entering multiple companies, separate the tickers with commas. When entering sets, ensure that a **$** precedes the set name. If you are not sure of a ticker or set name, click the **Look Up** button.
4. Click the **View** button.



The Company Data dialog box displays, with the companies presented in alphabetical order. Notice that Research Insight shows no data available (@NA) for each year. (Research Insight only displays @NA data codes for number data types.)



5. Select the cell next to the year that you want to add data, and enter the data value in the activated cell.
6. When you are finished entering data for the first company, click the **Accept** button, then click the **Next Co** button.
   The Company Data dialog box displays for the second company.
7. Again, select the cell next to the year that you want to add data, and enter the data value in the activated cell.
8. When you are finished entering data for the second company, click the **Accept** button.
9. Select the **New Item** button to add values for another data item, or close the Company Data dialog box to return to the Research Insight desktop.

Calculating Data Values

Another method of adding data values to Research Insight is to create a formula which Research Insight calculates for the company or set and the time periods that you select. Research Insight stores the result of the formula as an item value. Keep in mind that this value is not updated if the values of the items in the formula change.

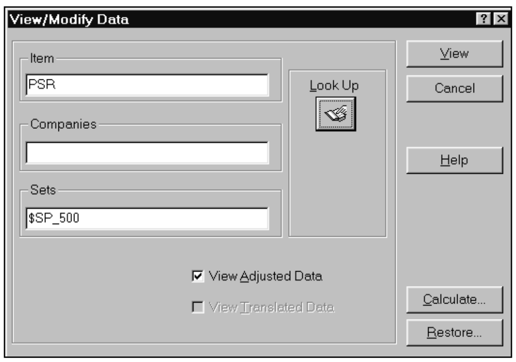
The following example is based on a newly created item named Price to Sales Ratio with the mnemonic PSR. Price to Sales Ratio takes a company's Market Value (time referenced to the last month of its fiscal year) and divides it by Annual Sales. In the example, this item is calculated for the population of companies in the S&P 500.

Begin from the Research Insight desktop:

1. From the **Databases** menu, select **View/Modify Data** to display the View/Modify Data dialog box.
2. Enter the mnemonic for your item in the **Item** field.

Note: Notice the View Adjusted and View Translated fields. You must de-select the View Adjusted field if you are modifying an adjusted item such as price, shares, etc. For COMPUSTAT (Global) subscribers, you must de-select the View Translated field if you are modifying any item.

3. Enter a company ticker in the **Companies** field, or a set in the **Sets** field. When entering multiple tickers, separate the tickers with commas. When entering sets, ensure that a **$** precedes the set name. If you are not sure of a ticker or set name, click the **Look Up** button.

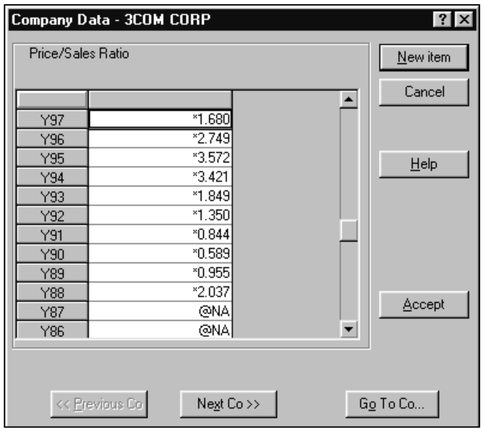


4. Click the **Calculate** button to display the Calculate Data dialog box. (See the *during Calculate Data* data item characteristic on page 8 of Chapter 2.)

5. Enter the formula you want to calculate in the **Formula** field.
6. Select the time period or range of periods for which you want to calculate values.
   For example, if the item you have created has an annual periodicity, and you want to calculate values for 1988 through 1997, enter:

   From: Y88 **To:** Y97

7. Click the **Build** button.
   After calculating the formula, Research Insight returns you to the View/Modify Data dialog box.
8. To review the results of the calculation, click the **View** button.
   Research Insight shows the data values for the time period or range of periods that you selected in the Calculate Data dialog box. Notice that an asterisk (*) appears next to any added or calculated data value.



Hint: Click the **Next Co** button to view the data for the next company you selected (for example the next company in the S&P 500 set). To go to a specific company in the set, click the **Go To Co** button, and the Companies dialog box displays. Scroll down the list and double-click on the company you want.

Importing Data into Research Insight

If you have a large quantity of your own data to incorporate into Research Insight, you may want to import it from Excel. For more information on importing, refer to Chapter 12 - Importing and Downloading of the *Getting Started* manual.

Before you import data into Research Insight, you must first create a spreadsheet file containing the data you want to import, as described in the following section.

Creating the Spreadsheet

To create a spreadsheet file, open a new document in Excel. Create the table header containing a valid retrieval key (e.g. ticker symbol), one or more mnemonics recognized by Research Insight and a valid time period reference for each mnemonic. An example is shown below:

	A	B	C	D
1	Key	Mnemonic	Mnemonic	Mnemonic
2	Field	Field	Field	Field
3	Field	Field	Field	Field
4	Field	Field	Field	Field

Retrieval Keys

Valid retrieval keys include:

TIC	The company's ticker symbol.
CUSIP	The company's CUSIP number, a 9-digit number.
GVKEY	The company's Company Key in the Global database.
Currency Key	A currency key used for the Global database.

If you want to import an Issue, Business Segment or Geographic Segment, enter the ticker symbol, a backslash, the appropriate segment letter and two-digit segment identifier. For example, to import data for the Domestic Geographic segment of the Mirage Hotel and Casino, you would use MIR\G01 as the ticker symbol.

Mnemonics

Valid mnemonics will match mnemonics from the data dictionary of the active database group. Absolute or relative time period referencing is required for items with a periodicity.

An example of a spreadsheet recognized by Research Insight is shown below:

	A	B	C
1	TIC	Sale[y96]	Sale[y97]
2	IBM	14562699	13046796
3	HWP	38420000	42895000
4	DEC	75947000	78508000

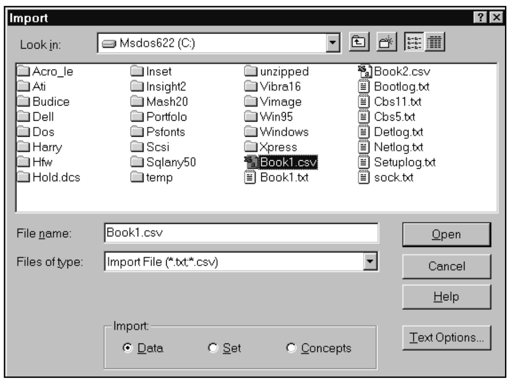
We recommend that you save the spreadsheet as a csv (comma delimited) file. After saving the file, close Excel. Now, you're ready to import the data into Research Insight.

Importing Data

After creating a delimited ASCII file, you are ready to import the data into Research Insight. The data you import will be loaded into the write-to database. The file you are importing must be closed before you proceed.

Begin from the Research Insight desktop:

1. From the **File** menu, select **Import** to display the Import dialog box.



2. Select the drive and folder where the file you want to import is located.
3. Select the file you want to import.
4. If you want to import a file delimited by anything other than commas or tabs, click the **Text Options** button, select your column delimiter and click **OK**.
5. Ensure that the **Data** radio button is selected.
6. Click **Open** to import the file.
   If you saved your spreadsheet as a comma separated file with the .csv extension, Research Insight displays a message asking you to confirm that the file is indeed comma separated. If so, click **OK**. If not, click **NO** and select the delimiter used for the file.
   A window will briefly display an import progress bar, the write-to database, the type of retrieval key used, and the items being imported.

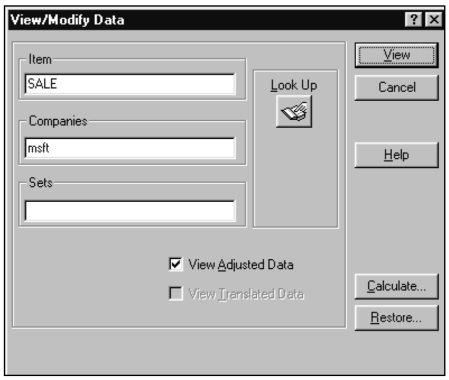
Hint: An import error file (import.err) is created if an import attempt is unsuccessful. This file explains what needs to be corrected to import successfully.

Editing Existing Data Values and Adding Data Values into the Future

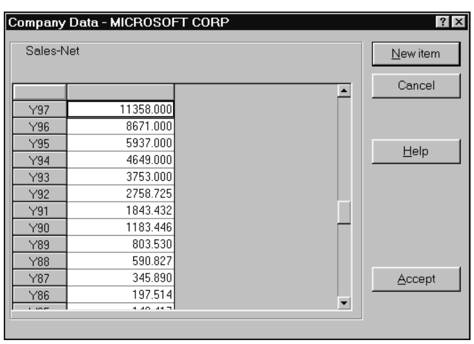
With Research Insight, you can change existing data values for any type of data item. You can also add data values for companies, business segments, geographic segments, issues and currencies for future time periods, making Research Insight a powerful forecasting tool.

Begin from the Research Insight desktop:

1. From the **Databases** menu, select **View/Modify Data** to display the View/Modify Data dialog box.



2. Enter the mnemonic for the data item that you want to edit in the **Item** field.
   For a list of all available data items and their mnemonics, click the **Look Up** button. The **Look Up** list includes data items you have previously added and all other Research Insight data items.
3. Enter the company ticker in the **Companies** field.
4. Click the **View** button.
   The Company Data dialog box displays for the company you have selected.
5. Select the cell next to the year for the data you want to change and enter the data value in the activated cell. To add a value into the future, scroll up, select the appropriate year, and enter the value in the cell.



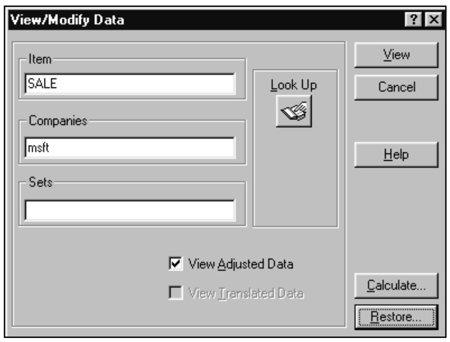
When you initially add or change a value, Research Insight displays it in a yellow field. After you accept the value, Research Insight identifies it with an asterisk (*).

6. When you are finished, click the **Accept** button.
7. To edit another data item, click the **New Item** button.

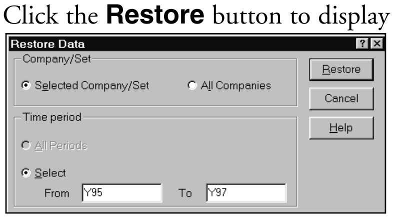
Restoring the Original Data Value

If you have edited or changed a value for a Research Insight data item, you can restore it to its original form or to the value contained on the core database.

1. From the **Databases** menu, select **View/Modify Data** to display the View/Modify Data dialog box.



2. Enter the item that you want to restore in the **Item** field.
3. Enter a ticker in the **Companies** field or a set name in the **Sets** field.
4. Click the **Restore** button to display the Restore Data dialog box.



5. To restore the data for the company or set you entered in the View/Modify Data dialog box, keep the default setting of **Selected Company/Set**. To restore the data for every company in the database, select **All Companies**.
6. Select the time period for which you want to restore data.
   For example, if you want to restore data for an annual item for 1995 through 1997, enter the following: **From** Y95 **To** Y97
7. Click the **Restore** button.
   After restoring the data values, Research Insight returns you to the View/Modify Data dialog box. From here you can proceed to restore another data item, or close the dialog box and return to the Research Insight desktop.

Note: Restoring user-defined data items returns all data fields to @NA (not available). You cannot restore user-defined data values to previous user-defined data values. To learn how to create and store multiple user-defined values for an item, refer to Chapter 10 - Managing Your Databases.

Chapter 4
Adding Companies

In addition to adding data items, Standard & Poor's Research Insight gives you the flexibility to add a company or set of companies not already included in one of the COMPUSTAT databases. You can also add data values for as many data items as you like to the new company. Once you add a company, you can analyze and compare it to other companies in the database, using all of the analytical tools available in Research Insight.

This chapter covers

- adding your own company
- assigning data values to a company
- deleting a company
- moving a company to another database

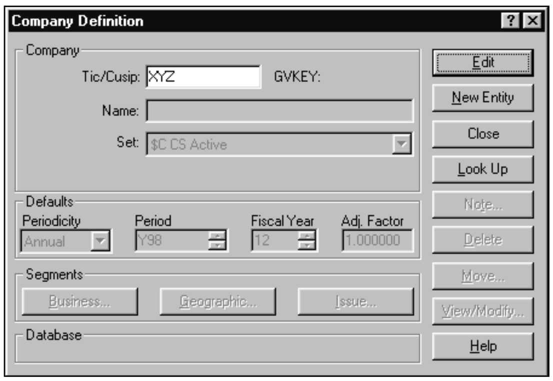
Adding a Company to Research Insight

To add a company to Research Insight you must assign a ticker symbol, define company characteristics and assign values for specific company data items.

Assign a Company Ticker Symbol

Begin from the Research Insight desktop:

1. From the **Databases** menu, select **Company**.
   The Company Definition dialog box displays. This is the primary dialog box used to define all of the details of your company.



2. Enter a unique ticker symbol in the **Tic/Cusip** field to identify the company.
3. Click the **Edit** button.
   Research Insight checks to see if this company already exists in the active Database Group. If the company does not exist, you will see a message:
   "No record with the key "ABC" was found in the database. Do you want to add it to the database?
4. Click **OK** to add the company.

   Now you are ready to define the characteristics of the company. Keep the Company Definition dialog box open and proceed to the following steps.

Define Company Characteristics

The following company characteristics must be defined in the Company Definition dialog box to complete the process of adding a company to the database.

Assign a GVKEY and CUSIP Number

When you add a company, Research Insight automatically assigns it a GVKEY (this is a five-digit number preceded by a U and used by Research Insight to identify your company). The GVKEY is not assigned until you click **Accept**, and it's not visible until you attempt to edit the company again. If you have access to Cusip Service Bureau information, you can also assign your company a Cusip number. Simply select Cusip from the **Company** drop-down list and enter the **Cusip Number**.

Enter the Company Name

Enter the name of the company in the Name field.

Select a Set of Related Companies

Use the Set drop-down list to select the $Set that you want to associate your company with. For example, if you want to access your company while working with the population of Canadian companies in the COMPUSTAT (North America) database, select **$T Canadian**.

By default, Research Insight associates your company with the set of active companies in the Default Database ($C for the population of active North America companies; $G for the population of industrial active Global companies.

Identify the Current Period

Use the Periodicity and Period fields together to select the current period for each reporting period used by Research Insight: annual, quarterly, monthly, weekly and daily.

The current period indicates the most recent data available for a reporting period. For example, if the latest annual reporting period for a company was December 2001, then select the Period of Y01 for the annual Periodicity. If the latest quarterly reporting period for a company with a fiscal year ending in December is the first quarter of 2002, in the Periodicity field, select "quarterly"; in the Period field, select "Q1Y02". To complete this step, select the current period for the monthly, weekly and daily periodicities.

Note: Each time you add a future data value for your company you need to reset the current period. For example, suppose you add a company in 2001 and select 2001 as the current period at that time. When you add a value for SALE (or any other item) in 2001, you need to reset the current period to 2001 in the Company Definition dialog box. You also have to select equivalent settings for the other periodicities. You do not need to do this when you add historical data.

Indicate the Company's Fiscal Year

Use the arrow keys in the Fiscal Year field to select the month in which a company reports its annual financial statements.

Select an Adjustment Factor

The Adjustment Factor field is used to adjust all user added items that require it. Generally, the adjustment factor should remain on the default setting of **1.000**.

Add Business Segments, Geographic Segments or Issues

For a complete explanation of how to add segments to a company, refer to Chapter 5 - Editing Companies.

If you are working with the COMPUSTAT (Global) database, you need to make an additional selection within the Company Definition dialog box.

Select the Native Currency

Use the currency field to select the native currency for your company. To access all of the available Global currencies, click **Look Up** and select **$N GV Currency** from the Select Company Category list.

If you are adding a company that reports its financial statements in a currency not included in the Global database, you will first need to add the currency and three translation rates for one of the primary currencies. Refer to Chapter 8 - Adding and Editing Currencies.

Add a Note to Your Company

You may find it useful to include a note about your company for future reference.

Begin from the Company Definition dialog box:

1. Click the **Note** button to display the Note dialog box.
2. Enter your note at the cursor.
3. Once you are finished, click **OK**.
4. Click **Accept** in the Item Definition dialog box to save your note.

To edit an existing note, access the Note dialog box and type over what you have previously written. Click **OK**. To save your changes, make sure that you select the **Accept** button in the Company Definition dialog box.

Assigning Data Values to a Company

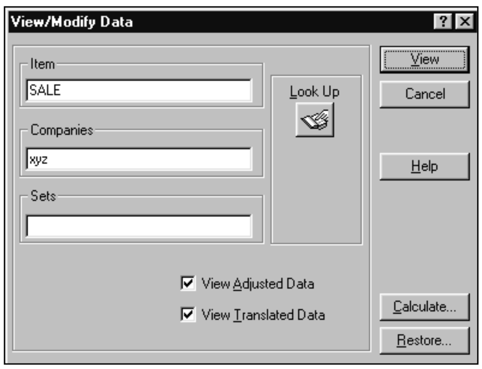
Once you have added a company, the next logical step is to add values for company data items such as Net Sales (SALE), Income Before Extraordinary Items (IB), Total Assets (AT), Primary SIC Code (SIC) and so on. Research Insight provides you with three ways of doing this: adding data manually, calculating data and importing data from an ASCII file.

The following section is based on an example of adding Net Sales and Total Assets to a user-added company with the ticker **XYZ**.

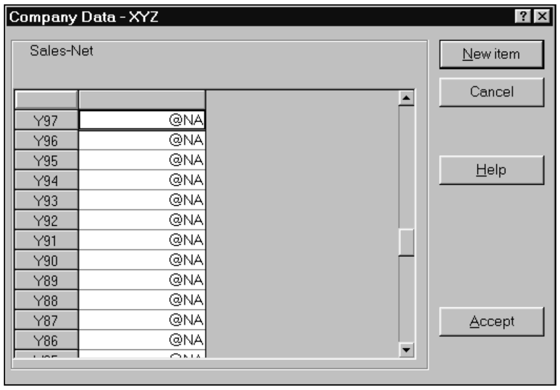
Adding Data Manually

Continue from the active Company Definition dialog box:

1. Click the **View/Modify** button.
   The View/Modify Data dialog box displays.



2. Enter an item mnemonic in the **Item** field.
3. Enter a company ticker in the **Companies** field.
4. Click the **View** button.
   The Company Data dialog box appears for the item. Notice that Research Insight shows no data available (@NA) for each available year. (The available years range from 1950 to 2049.)



5. Select the cell next to the year to which you want to add data, and enter the data value in the activated cell.
6. When you are finished entering data for the first item, click the **Accept** button, then click the **New Item** button.
   The View/Modify Data dialog box appears again.
7. Enter another item mnemonic in the **Item** field and click the **View** button.
   The Company Data dialog box appears for the second item.
8. Again, select the cell next to the year for which you want to add data, and enter the data value in the activated cell.
9. When you are finished entering data for the second item, click the **Accept** button.

Calculating Data Values

As a second approach for entering company data into Research Insight, you can calculate values for an item from existing items, concepts and values in Research Insight. For a complete explanation of calculating data values, refer to Chapter 3 - Editing and Assigning Data Values.

Importing Data into Research Insight

The third method for entering company data into Research Insight is importing data from an ASCII file. For a complete explanation of importing, refer to Chapter 12 - Importing and Downloading, of the *Getting Started* manual.

Deleting a Company

Once you decide that you have no further need for a company you have added, you can delete it along with all of its associated data values.

To delete a company:

1. Select **Company** from the **Databases** menu.
2. Enter the ticker for your company in the **Tic\Cusip** field.
3. Click the **Edit** button.
4. Click the **Delete** button.
   You are asked if you want to delete the company and all of its associated data.
5. Click **OK**.
   Research Insight deletes your company and the associated data values.

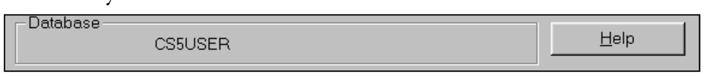
Note: Research Insight won't allow you to delete a company or any of its associated data values from the COMPUSTAT database. You cannot accidentally delete any data from the core database.

Moving a Company to a Different Database

When you add a new company, Research Insight stores the item in a write-to database, rather than in the COMPUSTAT North America or Global core databases. There are two write-to databases associated with the core databases in Research Insight.

	Write-to Database
COMPUSTAT (North America)	CS5USER
COMPUSTAT (Global)	GV5USER

The Database area at the bottom of the Company Definition dialog box indicates where the data item you created will be stored.

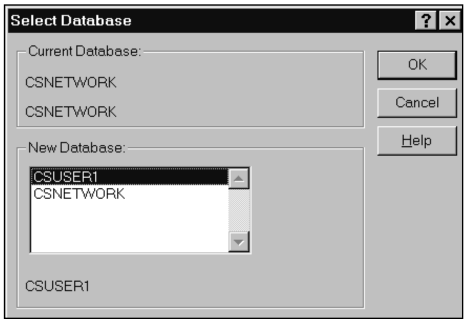


This section assumes you have previously created additional databases.

Begin from the Company Definition dialog box:

1. Enter a Ticker or cusip in the **Tic/Cusip** field.
2. Click **Edit**, then click **Move** to display the Select Database dialog box.

All of the available write-to databases are listed here.



3. Select the database that you want to move your company to.
4. Click **OK**.
   The new database is identified at the bottom of the Company Definition dialog box.
5. Click the **Accept** button instead of the **Close** button. By doing so, Research Insight accepts the database move for the company.

Chapter 5
Adding Segments and Issues

With Standard & Poor's Research Insight, you can add geographic segments to a new company that you have added to the database, modify the business segments for an existing company and add market data for a secondary stock issue of any Research Insight company.

This chapter covers

- adding a business segment to a company
- adding a geographic segment to a company
- adding a secondary stock issue to an existing company
- restoring and delete segments

Adding a Business Segment to a Company

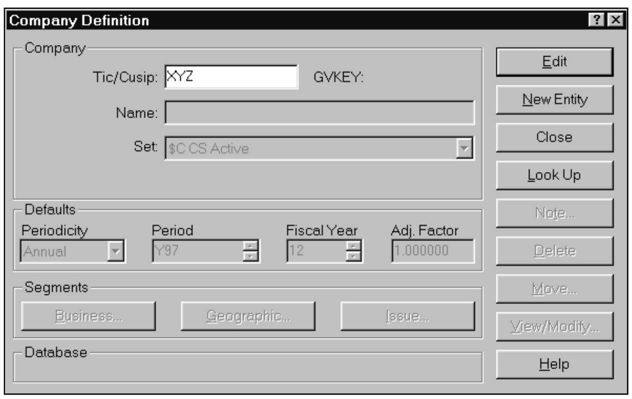
A business segment is a division, subsidiary or other part of a company that reports financial results, such as sales, operating income and assets. Many companies report basic financial information by operating segments in the notes to their financial statements. You can add up to ten business segments for a single company per year.

The following example illustrates how to add two segments to XYZ Company. Follow the same basic procedures to edit segment information for any Research Insight company.

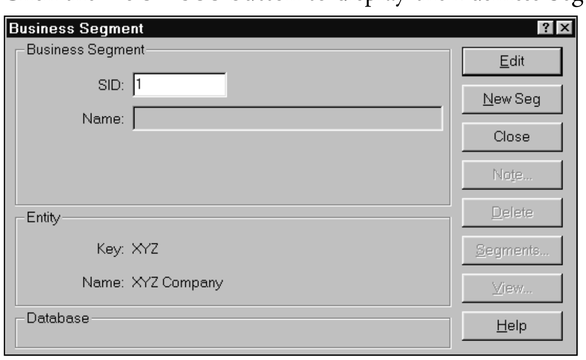
Adding a Business Segment

Begin from the Research Insight desktop:

1. From the **Databases** menu, select **Company to** display the Company Definition dialog box.
2. Enter **XYZ** in the **Tic/Cusip** field.

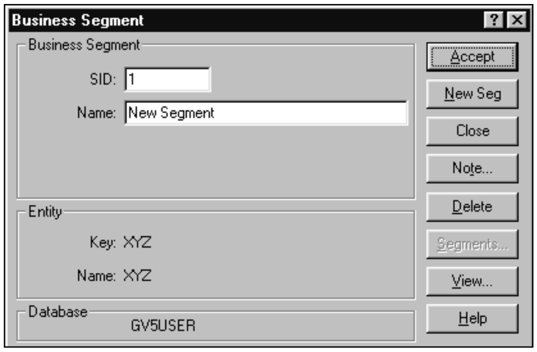


3. Click the **Edit** button to activate the fields in the Company Definition dialog box.
4. Click the **Business** button to display the Business Segment dialog box.



5. Enter a **1** in the **SID** field.
   This number is the Segment Identification Number.

6. Click the **Edit** button.
   Research Insight checks to see if the segment already exists. You will see a message asking if you want to add the business segment.
7. Click **OK**.
   This activates all of the fields in the Business Segment dialog box.



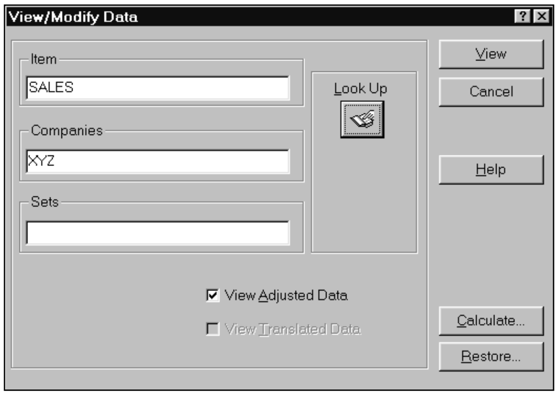
8. Enter a name for the segment in the **Name** field.
   By default Research Insight repeats the SID in the **Name** field if no name is entered.
9. Click the **Accept** button.
10. To add a second segment, repeat steps 5 through 9.

The next step is to add values for segment data items such as Sales, Operating Income and Assets. You can add data manually, calculate the data or import data from an ASCII file.

Adding Business Segment Data Manually

Begin from the Research Insight desktop:

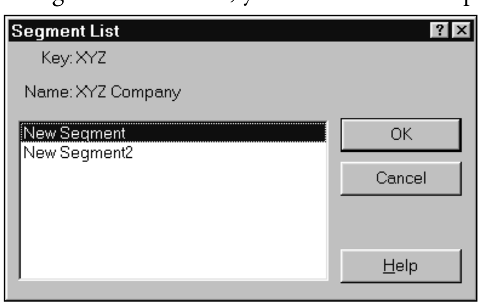
1. From the **Databases** menu, select **View/Modify Data** to display the View/Modify Data dialog box.



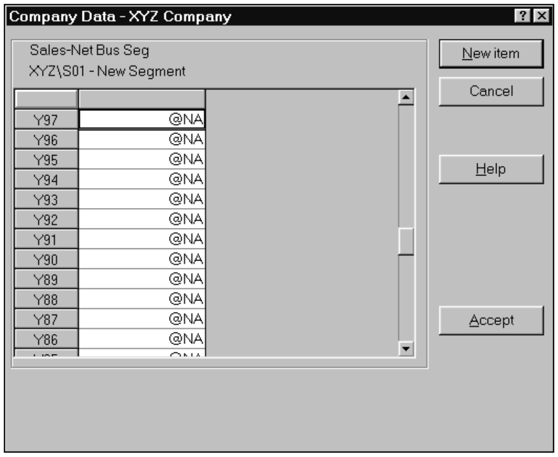
2. Enter a segment data item mnemonic in the **Item** field.
   For example, the mnemonic for Sales Net Business Segment is SALES. Other key segment data items include:

Name	**Mnemonic**
Operating Profit	OPS
Identifiable Assets	IAS
Sic Codes	SICS

   For a complete list of segment data items, click the **Look Up** button and select the **Business Segment** item category.
3. Enter a company ticker in the **Companies** field.
4. Click the **View** button. If you added more than one segment, you will see the Segment List dialog box. Otherwise, you will see the Company Data dialog box.



5. Click **OK** to add SALES values for the first segment.
   The Company Data dialog box displays.



6. Enter data values for all the time periods for which you have data.
7. Click the **Accept** button.
8. Click the **New Item** button to return to the View/Modify Data dialog box.
   At this point, you can add another item to the first segment of your company, or add the same item to the second segment of your company. Let's add the same item to another segment.
9. Click the **View** button.
   The Segment List dialog box displays again.
10. Click the name of the second segment (New Segment2), and click **OK**.
    The Company Data dialog box displays for the item you selected for the second segment of your company.
11. Enter data values for all the time periods for which you have data.
12. Click the **Accept** button.

Calculating or Importing Data Values

Instead of manually entering data, you may want to have Research Insight calculate values from existing items, concepts and values in Research Insight. For a complete explanation of calculating data values, refer to Chapter 3 - Editing and Assigning Data Values.

Another option is to import segment data from an ASCII file. For a complete explanation, refer to Chapter 12 - Importing and Downloading of the *Getting Started* manual.

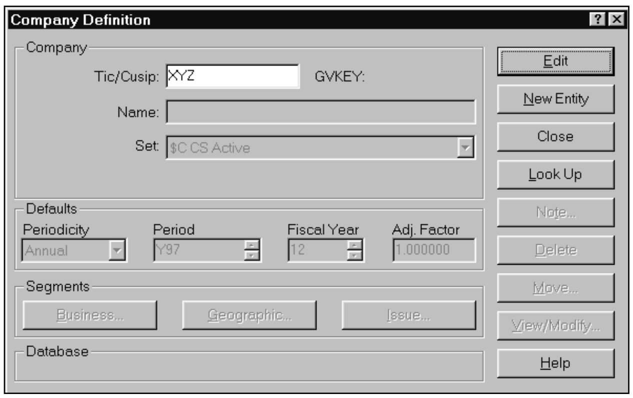
Adding a Geographic Segment to a Company

As with business segment data, many companies report basic financial information by geographic operating units in the notes to their financial statements. With Research Insight, you can add up to five geographic segments for a single company per year.

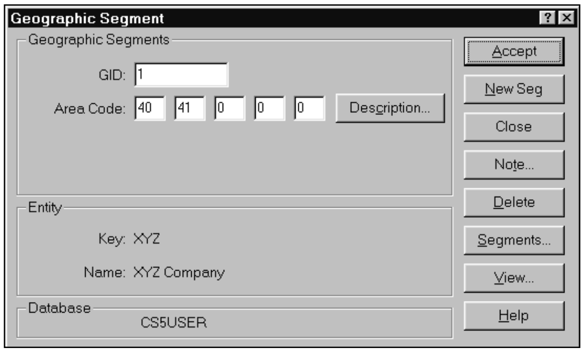
The following example illustrates how to add two geographic segments to XYZ Company. Follow the same basic procedures to edit geographic segment information for any Research Insight company.

Begin from the Research Insight desktop:

1. From the **Databases** menu, select **Company** to display the Company Definition dialog box.
2. Enter **XYZ** in the **Tic/Cusip** field.



3. Click the **Edit** button to activate the fields in the Company Definition dialog box.
4. Click the **Geographic** button to display the Geographic Segment dialog box.
5. Enter a **1** in the **GID** field. This is the Geographic Segment Identification Number.
6. Click the **Edit** button. You will see a message asking if you want to add the segment to the database.
7. Click **OK** to activate the fields in the Geographic Segment dialog box.
   At this point, you can add Area Codes to the segment identifying the countries and regions where the operations are located. Research Insight allows for up to five codes for each segment. Although theses codes are useful, they are not required. To see a list of the codes, click the **Description** button in the Geographic Segment dialog box.



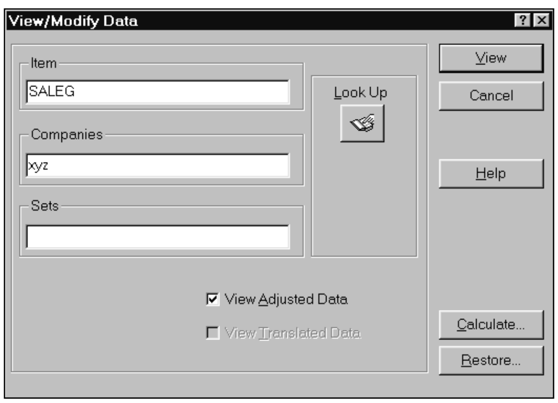
8. Click the **Accept** button.
9. To add a second segment, repeat steps 5 through 8.

Now you are ready to add values for geographic data items such as Sales, Operating Income and Assets.

Adding Geographic Segment Data Manually

Begin from the Research Insight desktop:

1. From the **Databases** menu, select **View/Modify Data** to display the View/Modify Data dialog box.

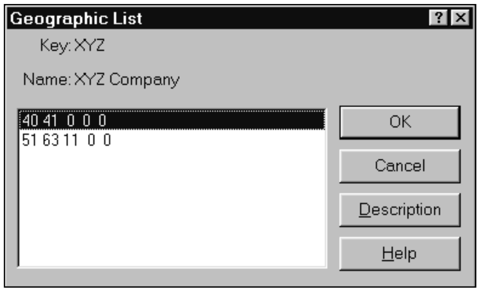


2. Enter a geographic segment data item mnemonic in the **Item** field.
   For example, the mnemonic for Sales-Net Geographic Segment is SALEG. Other key segment data items include the following:

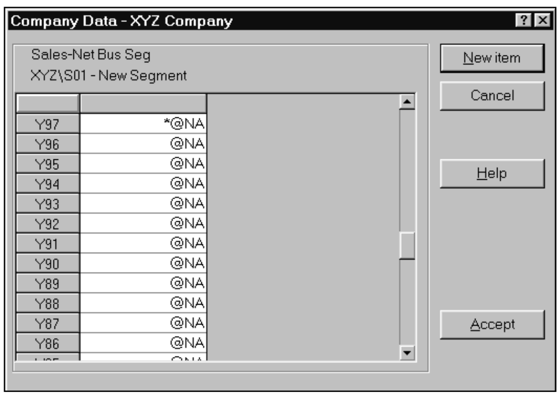
Name	**Mnemonic**
Operating Profit	OPG
Identifiable Assets	IAG

   To find a list of additional geographic segment data items, click the **Look Up** button and select the **Geographic Segment** category.

3. Enter a company ticker in the **Companies** field.
4. Click the **View** button. If you added one geographic segment. proceed to Step 5. If you added more than one segment, the Geographic List dialog box will open.



5. Click **OK** to add SALEG values for the first segment.



6. Enter your data values for the time periods for which you have data.
7. Once you are finished, click the **Accept** button.
8. Click the **New Item** button to return to the View/Modify Data dialog box.
   At this point, you can add another item to the first geographic segment of your company, or add the same item to the second segment of your company. We'll add the same item to the second segment.
9. Click the **View** button.
   The Geographic List dialog box displays again.
10. Click the second segment, and click **OK**.
    You'll see the Company Data dialog box for the item you have selected for the second segment of your company.
11. Enter your data values for the time periods for which you have data.
12. Once you are finished, click the **Accept** button.
13. Click the **New** Item button to return to the View/Modify Data dialog box, or close the dialog box if you are finished adding segment data.

Calculating Data Values

As a second approach to entering geographic segment data into Research Insight, you can calculate values for an item from existing items, concepts and values in Research Insight. For a complete explanation of calculating data values, refer to Chapter 3 - Editing and Assigning Data Values.

Importing Data into Research Insight

The third approach to entering geographic segment data into Research Insight is importing data from an ASCII file. Refer to Chapter 3 - Editing and Assigning Data Values, or for a complete explanation refer to Chapter 12 - Importing and Downloading of the *Getting Started* manual.

Adding a Stock Issue to a Company

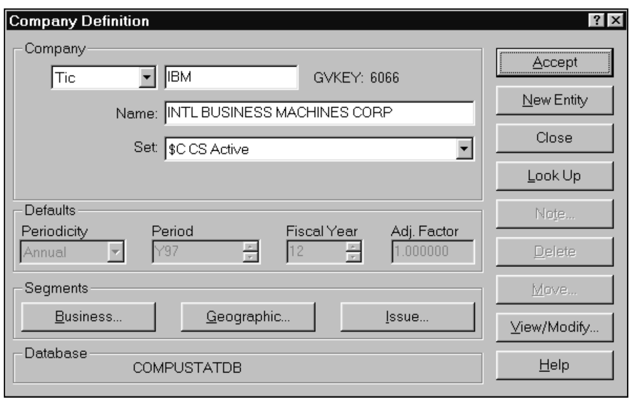
The issue segment represents a stock issue for a company in the database. The issue segment contains a company's market data, such as daily price information.

With Research Insight, you can add an issue segment for a company that you have added, or add secondary stock issues for any Research Insight company.

The following procedures take you through the steps of adding a second issue segment to IBM.

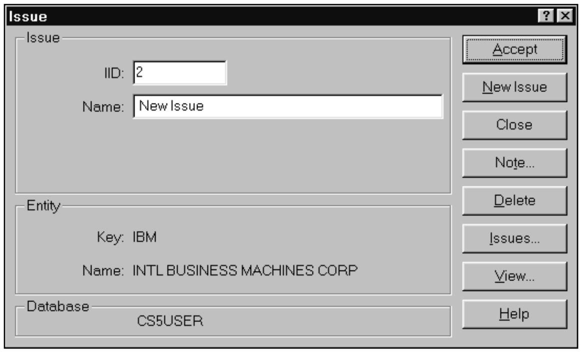
Begin from the Research Insight desktop:

1. From the **Databases** menu, select **Company**.
   The Company Definition dialog box displays.



2. Enter a ticker symbol in the **Tic/Cusip** field.
3. Click the **Edit** button.
   All of the fields in the Company Definition dialog box are now activated.

4. Click the **Issue** button to display the Issue dialog box.



5. Enter **2** in the **IID** field. (Most Research Insight companies will already have a **1** issue.) This number is the Issue Identification Number.
6. Click the **Edit** button.
   Research Insight checks to see if the segment already exists. If it doesn't exist, you are asked if you want to add it.
7. Click **OK**.
   All of the fields in the Issue dialog box are now activated.
8. Enter a descriptive name for the issue in the **Name** field.
9. Click **Accept**.
10. To add another issue, repeat steps 5 through 9.

Adding Data to Your Issue Segment

Once you have added an issue segment to a company, the next logical step is to add values for issue data items such as Prices, Shares Traded and Total Return Factors. Research Insight provides you with three ways of doing this: adding data manually, calculating data and importing data from an ASCII file.

Adding Data Manually

Begin from the Research Insight desktop:

1. From the **Databases** menu, select **View/Modify Data**.
   The View/Modify Data dialog box appears.

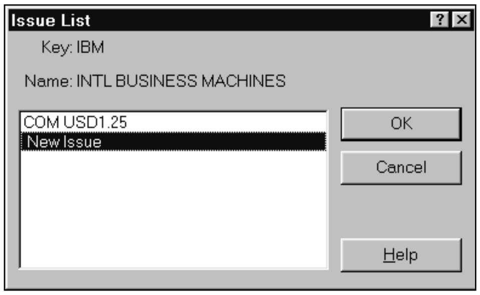
Note: You must de-select the **View Adjusted** field if you are modifying an adjusted item such as price, shares, etc. For Global subscribers, you must de-select the **View Translated** field if you are modifying any item.

2. Enter an issue data item mnemonic in the **Item** field.
   For example, the mnemonic for Price-Close Daily is PRCCD. Other key issue data items include the following:

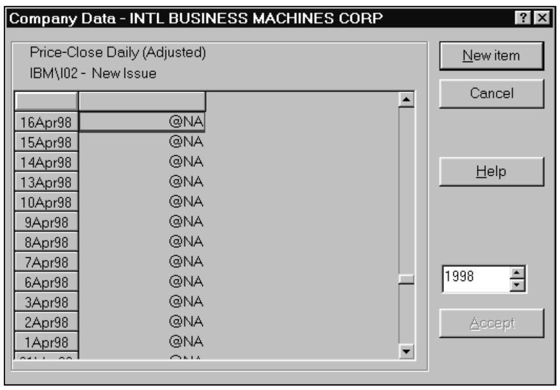
Name	Mnemonic
Total Return Factor-Daily	TRFD
Price - High Daily	PRCHD
Price - Low Daily	PRCLD

3. Enter a company ticker in the **Companies** field.
4. Click the **View** button.

The Issue List dialog box displays.



5. Select the issue you want and click **OK**.
   The Company Data dialog box displays for your company.



6. Enter your data values for the periods that you have data.
7. Once you are finished, click the **Accept** button.
8. Click the **New Item** button to return to the Company data dialog box, or close the dialog box if you are finished adding data to the issue.

Calculating Data Values

As a second approach to entering issue data into Research Insight, you can calculate values from existing items, concepts and values in Research Insight. For a complete explanation of calculating data values, refer to Chapter 3 - Editing and Assigning Data Values.

Importing Data into Research Insight

The third approach to entering issue segment data into Research Insight is Importing. The Importing feature allows you to incorporate data into Research Insight from an ASCII file. For a complete explanation, refer to Chapter 12 - Importing and Downloading, of the *Getting Started* manual.

Restoring and Deleting Segments

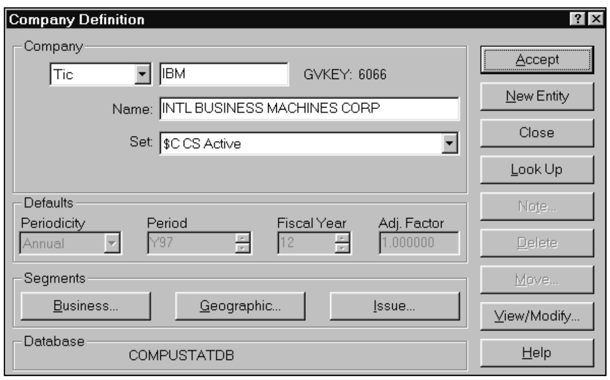
If you have changed or added a business, geographic or issue segment for a company, you can restore the company to its original formor the form in which it appears on the core database.

If you have added a business, geographic or issue segment for a company, you can delete it along with all of its associated data values.

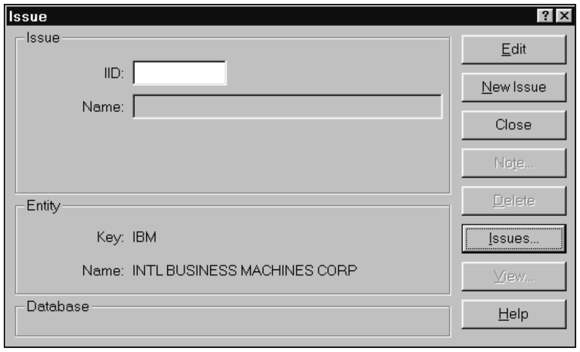
The following procedures take you through the steps of deleting a secondary issue segment previously added to IBM. Follow the same basic procedures for deleting user-added business and geographic segments.

Begin from the Research Insight desktop:

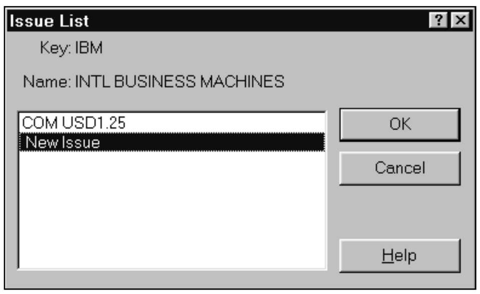
1. From the **Databases** menu, select **Company**.
   The Company Definition dialog box appears.
2. Enter the ticker for the company you want to restore in the **Tic/Cusip** field.
3. Click the **Edit** button.
   All of the fields in the Company Definition dialog box are activated.



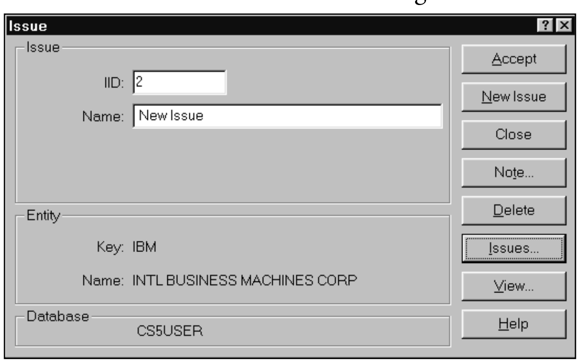
4. Click the **Issue** button to display the Issue dialog box.



5. Click the **Issues** button.
   The Issue List dialog box appears.



6. Select the issue that you have previously added and click **OK**.
   The issue is inserted into the Issue dialog box.



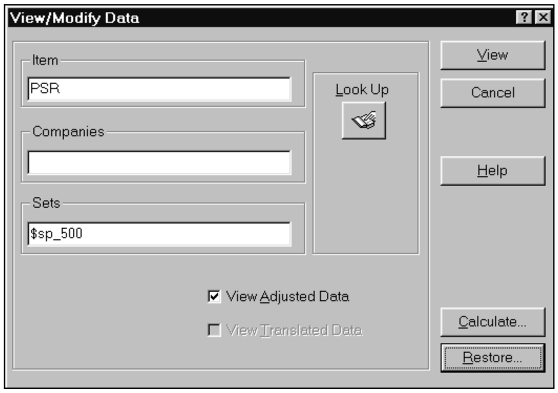
7. Click the **Delete** button.
   You are asked if you want to delete the issue and all of its associated data.
8. Click **OK**.

Restoring and Deleting Segment Data

If you have edited or changed a value for a data item, you can restore it to its original form or the value contained on the core database.

Begin from the Research Insight desktop:

1. From the **Databases** menu, select **View/Modify** Data.
   The View/Modify Data dialog box appears.



2. Enter the item that you want to restore in the **Item** field, and enter the company or set that you want to restore it for in the appropriate field.
3. Click the **Restore** button.
   The Restore Data dialog box appears.

4. To restore the data for the company or companies you selected in the View/Modify Data dialog box, keep the default setting of **Selected Company/Set**. To restore the data for every company in the database, select **All Companies**.
5. Select the time period for which you want to restore data.
   For example, if you want to restore data for an annual item for 1995 through 1997, enter the following:

   From Y95 **To** Y97

   The **All Periods** option is only available when **All Companies** is selected.

6. Click **Restore**.
   After restoring the data values, Research Insight returns you to the View/Modify Data dialog box. From here you can proceed to restore another data itemor close the dialog box and return to the Research Insight desktop.

Note: Restoring user defined data returns all data fields to @NA (not available). You cannot restore user-defined data to previous user-defined data.

Chapter 6
Exporting

With Standard & Poor's Research Insight, it's easy to save your report results as a text file and import them into Excel and other applications. You can also export the results of reports you have created and reports provided by Research Insight, and you can also export your own concepts to share with your colleagues.

This chapter covers

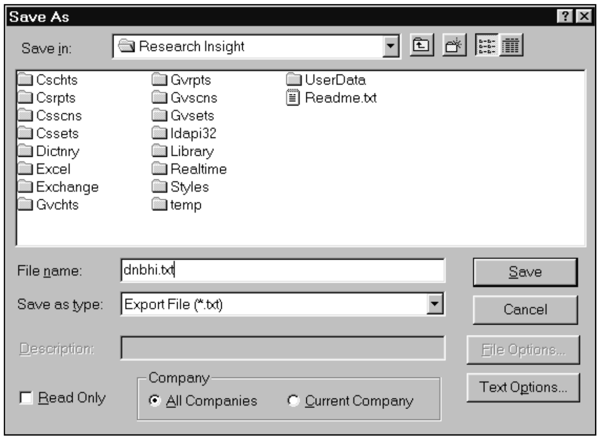
- exporting report results from Research Insight
- exporting concepts

Exporting Report Results from Research Insight

Research Insight makes it easy to export the results of tables and free-form reports to use in your own spreadsheet software.

Begin from the report you want to export:

1. From the **File** menu, select **Save As** to display the Save As dialog box.



2. Select a folder where you want to save the exported file.
3. Enter a name for the file you want to export in the **File Name** field.
4. By default the file will be tab-delimited. If you want to choose a different column delimiter, click **Text Options**.
5. In the Text Options dialog box, select a column delimiter.
   The column delimiter you use depends on the software to which you want to export the report results. For more information about the column delimiters required by your software program, refer to your specific software manual.
6. Click **OK** to return to the Save As dialog box.
7. Click **Save.**
   The file is now saved as an export file and is ready to use in Excel.

Exporting Concepts from Research Insight

This section shows you how to export concepts that you created in Research Insight.

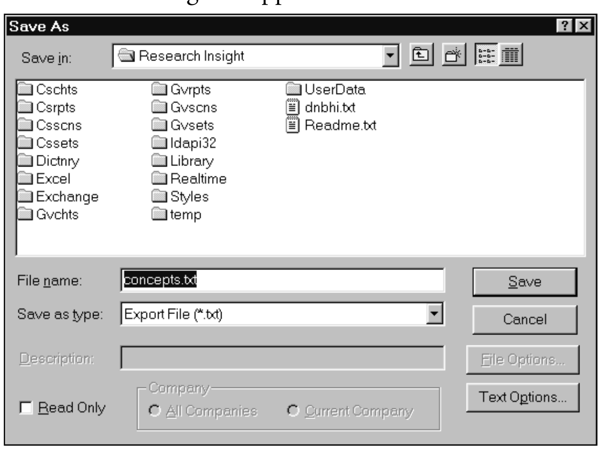
Begin from the Research Insight desktop:

1. From the **Tools** menu, select **Export Concepts**.
   The Export Concepts dialog box appears.

2. In the Show area, select **User**, **Non-User** or both.

User	Displays the concepts in databases you have created.
Non-User	Display concepts in the COMPUSTAT (North America) or COMPUSTAT (Global) databases.

3. In the From: list box, select the concepts you want to export.
4. Click **Add**.
5. Click **Accept**.
   The Save As dialog box appears.



6. Select a folder where you want to save the exported file.
7. Enter a name for the file you want to export in the **File Name** field.

8. By default the file will be tab-delimited. If you want to choose a different column delimiter, click **Text Options**.
9. In the Text Options dialog box, select a column delimiter.
   The column delimiter you use depends on the software to which you want to export the report results. For more information about the specific column delimiters required by your software program, refer to your specific software manual.
10. Click **OK** to return to the Save File dialog box.
11. Click **Save.**
    The file is now saved as an export file.

To access your exported concepts, your colleagues simply need to import them into their own Research Insight systems.

Chapter 7
Adding and Editing Concepts

Concepts are mathematical or logical combinations of data items and/or other concepts. Unlike data items, they don't contain values; instead they are evaluated each time you use them. Concepts are generally used to save time and increase accuracy when manipulating data in routine, repetitious or complex expressions.

You can find a list of existing concepts in the Research Insight Look Up List, in the Items tab, under Select Item Category. While Standard & Poor's Research Insight already contains more than 375 concepts, there may be times when you want to create a custom concept for your financial analysis. Research Insight makes it easy to modify existing concepts or create new ones.

This chapter covers

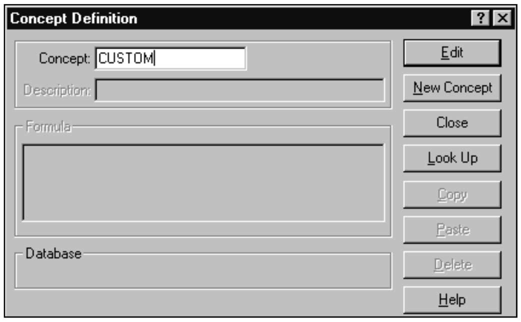
- creating your own concept
- editing an existing concept
- deleting a concept

Creating Your Own Concept

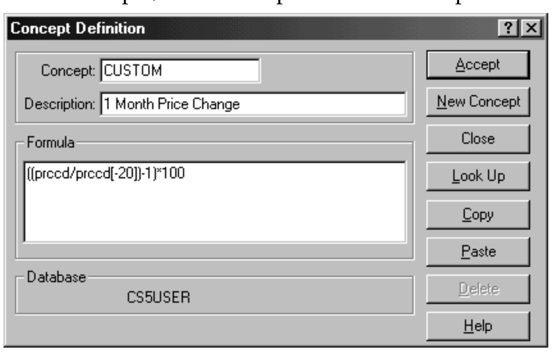
If you don't find an existing Research Insight concept that meets your needs, follow the steps below to create a custom concept.

Begin from the Research Insight desktop:

1. From the **Databases** menu, select **Concept** to display the Concept Definition dialog box.



2. Enter the mnemonic (abbreviated name) of your concept in the **Concept** field.
3. Click **Edit**.
4. Research Insight searches for other concepts with the same mnemonic, then asks if you would like to add your concept to the dictionary. Click **OK**.
5. Enter the full name of your concept in the **Description** field.
   Your concept name can be up to 28 characters long and can contain any combination of letters, punctuation and keyboard symbols.
6. In the Formula box, create your concept using items, mathematical operators, functions, other concepts, etc. Concepts can contain up to 512 characters.



7. When you are satisfied with your concept, click the **Accept** button to add it to the data dictionary.
8. Now you can retrieve your concept from the Look Up List, in the Items tab, under the

Select Item Category list box.

Note: To ensure the safety of the information in your write-to databases, we recommend you back up all of the files in your Research Insight\UserData directory on a regular basis.

Editing an Existing Concept

To edit your own concept or an existing concept, begin from the Research Insight desktop:

1. From the **Databases** menu, select **Concept** to display the Concept Definition dialog box.
2. Enter the concept mnemonic you want to edit in the **Concept** field or locate the concept in the **Look Up** list.
3. Click the **Edit** button.
   All of the concept information appears.
4. Make your changes to the concept and click **Accept**.
5. Research Insight asks you if you wish to overwrite the existing concept. Click **OK**.
   Your new concept is added to the data dictionary.

Note: If you modify a Research Insight concept, and you want to change it back to its original form, you can access the original concept in on-line help and paste it into the Concept Definition dialog box.

Deleting a Concept

You can delete concepts you have created or modified, as well as Research Insight concepts.

Begin with the Concept Definition dialog box:

1. Enter the concept mnemonic you want to delete in the **Concept** field or locate the concept in the **Look Up** list.
2. Click **Edit**.
   All of the concept information appears.
3. Click the **Delete** button.
4. To confirm that you want to delete the concept click **OK**.
   Your concept is deleted from the data dictionary.

Chapter 8
Adding and Editing Currencies

The COMPUSTAT (Global) database contains more than 110 different currencies used by companies to report their financial and market data. However, from time to time, you may want to use a currency that is not included in the Global database. This chapter explains how to add a new currency and translate data to and from any existing currency.

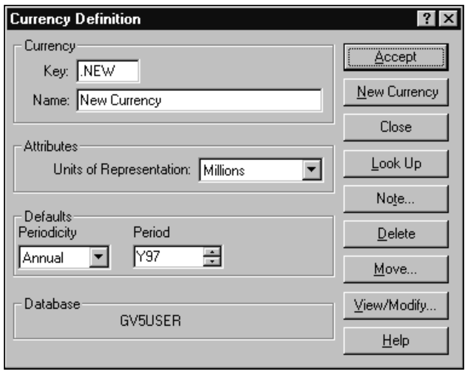
This chapter covers

- adding a new currency
- adding translation rate values
- editing translation rate values
- restoring translation rate data to its original form
- moving a currency to another database
- deleting a currency

Adding a New Currency

To add a new currency, begin from the Research Insight Desktop:

1. Make sure that COMPUSTAT (Global) is selected as the default database.
   From the **Databases** menu, select **Default Database**.
2. In the Default Database Group dialog box, select **GLOBALVantage** from the drop-down list and click **OK**.
3. From the **Databases** menu, select **Currency** to open the Currency Definition dialog box.



4. Enter a currency key (a three-letter code preceded by a period) in the **Key** field and press **Edit**. In this example, the currency key is **.NEW** for New Currency.
5. If your currency key does not already exist, Research Insight asks you if you want to add the currency to the write-to database. Click **OK**.
6. Enter the full name of the currency in the **Name** field. The name can be up to 28 characters long.
7. Select Millions or Billions from the **Units of Representation** drop-down list. Most currencies are listed in millions.

8. Select the current period (the most recent data available) for the new currency.

   Use the **Period** and **Periodicity** fields together to select the current period for each reporting period used by Research Insight: annual, quarterly, monthly, weekly and daily. For example, if the latest annual reporting period for a company was December 2001, then for the annual Periodicity select the Period of Y01. If the latest quarterly reporting period for a company with a fiscal year ending in December is the first quarter of 2002, in the Periodicity field, select “quarterly”; in the Period field, select “Q1Y02”. To complete this step, select the current period for the monthly, weekly and daily periodicities.

9. To include a note about the new currency, click the **Note** button and enter some text in the Note field. Click **OK** to save the note.

10. To add the currency to the write-to database, click the **Accept** button.
    Proceed to the next section to learn how to add currency translation rate values to the new currency.

Adding Currency Translation Rate Values

Currencies in the Global database are translated into one another using one of four Primary Currencies: British Pounds Sterling (.GBP), Swiss Franc (.CHF), Japanese Yen (.JPY) and United States Dollar (.USD).

In order to translate the new currency you added into another currency in the database, you first need to choose one of the four Primary Currencies, then add translation rate values from the new currency into the Primary Currency. The translation rate value is the number by which a data item is multiplied in order to be translated into a target currency.

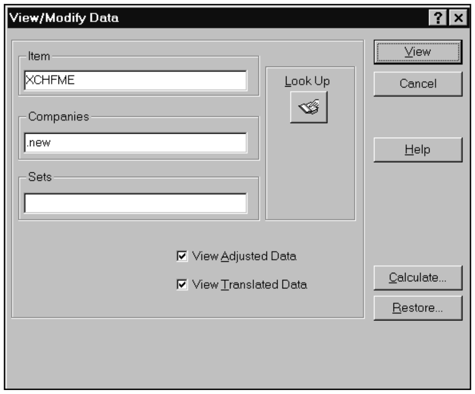
Research Insight uses three different translation rate values to translate different types of data items from a Primary Currency into the target currency. The example below shows the three translation rate data items for the Swiss Franc (CHF).

	Mnemonic	**Description**
Month Endrate	XCHFME	Translates point-in-time items, such as Balance Sheet items
Month Average rate	XCHFAV	Translates some market items, such as monthly high and low prices
12-Month Moving Average rate	XCHF12	Translates Flow items, such as Income Statement or Statement of Changes items,

The following steps show you how to add translation rate values for the new currency.

Begin from the Research Insight desktop:

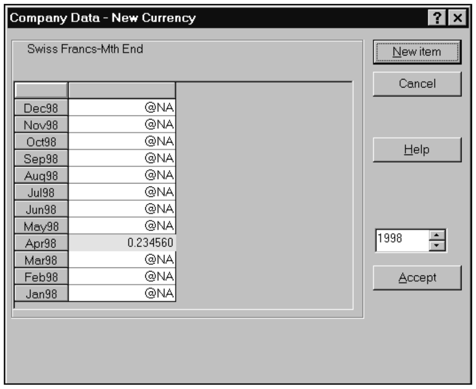
1. From the **Databases** menu, select **View/Modify Data** to display the View/Modify Data dialog box.



2. Enter one of the translation rate items in the **Item** field for the Primary Currency you selected. For example, to add a Month End translation value from the new currency into the Swiss Franc, enter XCHFME in the Item text box.

3. Enter the currency key for the new currency in the **Companies** field. Be sure to include the period (.) before the currency key. In our example, we used **.NEW** for New Currency. You can use the **Look Up** list to identify all available currency keys.

4. Click **View** to display the Company Data dialog box.



5. Enter the translation rate values in the appropriate cells.
6. Click **Accept** when you are finished.
   The new translation rate value is added to the write-to database.

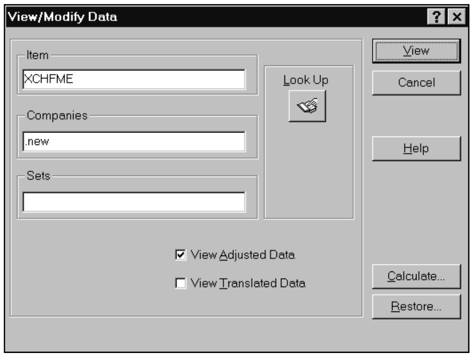
Note: Notice that your new data is highlighted. If you exit this dialog box and return to it later, an asterisk will appear next to the data value, identifying it as modified data.

7. Click **New Item** to return to the View/Modify Data dialog box.
8. Repeat steps 2-7 and add values for the Month Average translation rate from the new currency into the Swiss Franc (XCHFAV) and for the 12-Month Moving Average rate (XCHF12).

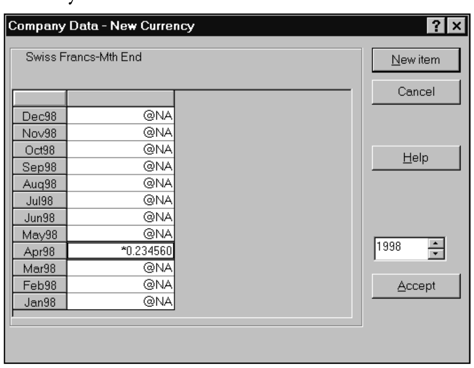
Editing Translation Rate Values

To change translation rate values for existing currencies, begin from the Research Insight desktop:

1. From the **Databases** menu, select **View/Modify Data** to display the View/Modify Data dialog box.



2. Enter the mnemonic for the translation rate item you want to change in the **Item** field. For example, if you want to edit the translation rate for the Swiss Franc month-end rate, you would enter **XCHFME**.
3. Enter the currency key in the **Companies** field. For example, if you want to edit the translation rate for New Currency, you would enter **.NEW**.
4. Click **View** to open the Company Data dialog box. You will see an asterisk next to the data values you have added.



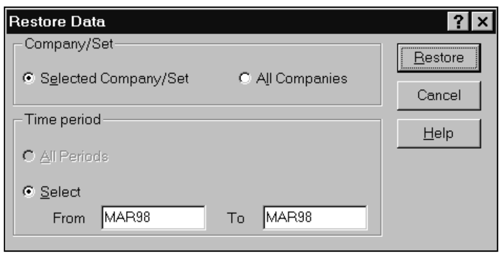
5. Enter the new information in the appropriate cell and click **Accept** to save your changes.

Restoring Translation Rate Data to Its Original Values

If you have changed the translation rate for an existing Research Insight currency, you can restore it to its original value or the value contained on the core database.

Begin from the Research Insight desktop:

1. From the **Databases** menu, select **View/Modify Data**.
   The View/Modify Data dialog box appears.
2. Enter the translation rate item you want to restore in the **Item** field.
   For example, if you want to restore the translation rate value for the Swiss Franc month-end rate, you would enter **XCHFME**.
3. Enter the currency key in the **Companies** field.
   For example, if you want to restore the translation rate for a currency named New Currency, you would enter **.NEW**.
4. Click the **Restore** button.
   The Restore dialog box appears.

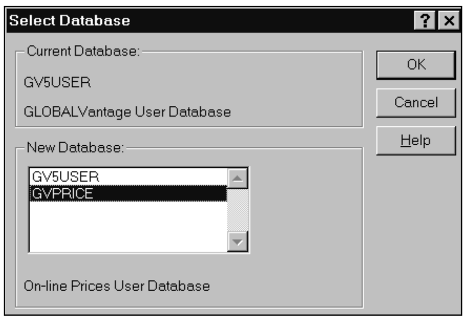


5. Ensure that the **Selected Company/Set** radio button is selected.
6. Enter the time period(s) that you want to restore data for in the **From** and **To** fields.
   For example, if you want to restore data for March of 1998, you would enter **Mar98** in the **From** field and **Mar98** in the **To** field.
7. Click the **Restore** button to restore the original values.

Moving a Currency to Another Database

When you create a new currency, Research Insight adds the data to the write-to database. This section shows you how to move currency data from one database to another. To learn more about creating and managing multiple databases, refer to Chapter 10 - Managing Your Databases.

Begin from the Research Insight desktop:
1. From the **Databases** menu, select **Currency**.
2. Enter the currency key in the **Key** field.
3. Click **Edit**, then click **Move**.
   The Select Database dialog box appears.



4. Select the database where you want to move the currency from the New Database list box and click **OK**.
5. Click **Accept**.
6. Click **OK** to confirm that you want to move the currency.
   Research Insight moves the currency to the database you selected and clears the Currency Definition dialog box.

Deleting a Currency

You can delete currencies you have added; however, you cannot delete currencies that already exist in the Global database.

Begin from the Research Insight desktop:
1. From the **Databases** menu, select **Currency**.
   The Currency Definition dialog box appears.
2. Enter the currency key for the currency you want to delete in the **Key** field and press **Enter**.
3. Click the **Delete** button.
4. Click **OK** to delete the currency and all associated data from the database.

Chapter 9
Creating Reports in Excel

One of the most powerful features of Standard & Poor's Research Insight is its ability to communicate with Microsoft Excel® through Active-X Technology. Excel requests data from the Research Insight database and the exchange between the two applications takes place so quickly that you immediately see the requested data displayed in the Excel spreadsheet. You can view Research Insight Reports and Charts directly in Excel, and create your own spreadsheets in Excel using all of the features and data available in Research Insight. The link between Excel and Research Insight brings you the power of both applications.

In this chapter, we'll show you how to create your own spreadsheets using Research Insight data. For more information on Research Insight and Excel refer to *Chapter 11 - Using Standard & Poor's Research Insight with Excel*, of the Getting Started manual.

This chapter gives you detailed information about

- creating Excel spreadsheets with Research Insight data
- batch printing
- cell referencing
- adding time period references

Creating an Excel Spreadsheet with Research Insight Data

Suppose you want to find out whether the Price to Earnings from Operations ratio for Black & Decker indicates that the company is a relatively "good buy." This chapter leads you step-by-step through creating a report in Excel on Black and Decker's Price/EPS from Operations for the past 12 months (to examine its stability over time); comparing the company to its industry peers; incorporating the company's short business description and finally printing the report for all companies in the comparison population.

Before you begin the exercise, first import **Active Sector** data through the Value Added Data download. For information on using the Task Scheduler to schedule internet downloads, refer to Chapter 12 - Additional Data Available through the Task Scheduler.

Basic Add-in Functions

Standard & Poor's has developed six add-in functions that you will use to bring Research Insight data into in Excel. The add-in functions are described below.

=spws("key","expression")
Displays a single data value in one cell for a company.

=spws_time_series("key","expression","begin_period","end_period", "array_direction")
Displays a data value over a period of time (an array) for a company.

=spws_set(set,"expression","array_direction")
Displays a single data value for each member of a set of companies.

=spws_set_sort(set,"expression","sort variable","sort direction", "array_direction")
Sorts a set of companies based on your own criteria.

=spws_screen("screen","set","date")
Runs a saved screen and returns a set of companies that pass your investment criteria for a given time period.

=spws_set_size ("set")
Displays the number of companies in a set.

Displaying Data for One Company in Excel

You'll use the spws add-in function to retrieve data from Research Insight for Black and Decker.

=spws("key","expression")

1. Let's begin by establishing the company's name and address. In cell **A1**, enter **=spws("bdk","conm")** and press **Enter.** This returns the company name, Black & Decker Corp.
2. In cell **A2** enter **=spws("bdk","add1")** and press **Enter.** This returns the street address for Black & Decker.

	A	B
1	BLACK & DECKER CORP	
2	701 E JOPPA RD	
3		

3. In cells **B2**, **C2**, and **D2**, complete the address information replacing "add1" in the above formula with **add2**, **add3**, and **addzip**, respectively.

	A	B	C	D
1	BLACK & DECKER CORP			
2	701 E Joppa Rd	Towson	MD	21286-5502

Selecting Companies with the Run Assistant

You can modify the formula you used above to open the Research Insight Run Assistant, rather than specifying one specific company.

4. Select cell **A1**.
   In the Excel formula bar, replace "bdk" with **Ticker**.

   =spws(Ticker,"conm")

   Press **Enter** and you will see the message "No company or set was specified for this formula".
5. Click the **(S&P Run Assistant)** button to open the Run Assistant dialog box.
6. Enter **bdk** in the **Companies** field and click **OK**.

Other examples using the spws add-in function:

=spws(ticker,"sale")
Returns the current years sales for the specified company.

=spws(ticker,"@pavg(oppe,-11,0)")
Averages the specified company's last 12 months Price/EPS from Operations ratio.

Displaying Data Over Time for a Company

The time series function displays a single data value over time for one company. With this function you can highlight a range of cells and enter the formula once to fill in the range.

> **=spws_time_series("key","expression","begin_period","end_period", "array_direction")**

Continuing with the exercise, you will now add some historical market data to the spreadsheet, to see how Black and Decker's current Price/EPS from Operations ratio compares to those over the past year.

7. To enter the dates for the range of months, highlight cells **A7** to **A18** and enter **=spws_time_series(ticker,"@mnt(0m)","0m","-11m","down")**, then press the **Ctrl+Shift+Enter** keys simultaneously. This enters the formula as an array of data. You can enter arrays either down or across the spreadsheet.

SUM =spws_time_series(Ticker,"@mnt(0m)","0m","-11m","down")

	A	B	C	D	E	F
1	BLACK & DECKER CORP					
2	701 E Joppa Rd	Towson	MD	21286-5502		
3						
4						
5						
6						
7	,"0m","-11m","down")					
8						
9						
10						
11						
12						
13						
14						
15						
16						
17						
18						

8. Next, add a title to the column: enter **Period** in cell **A6**.
9. Now bring in the Price/EPS from Operations data from Research Insight. Highlight cells **B7** to **B18,** enter **=spws_time_series(ticker,"oppe","0m","-11m","down")** and press **Ctrl+Shift+Enter**.
10. Add a title for the second column: enter **Price/EPS-Ops** in cell **B6**.

	A	B	C	D
1	BLACK & DECKER CORP			
2	701 E Joppa Rd	Towson	MD	21286-5502
3				
4				
5				
6				
7	Feb02	23.65855		
8	Jan02	20.07806		
9	Dec01	15.21371		
10	Nov01	14.93549		
11	Oct01	13.34274		
12	Sep01	10.57627		
13	Aug01	13.3322		
14	Jul01	14.47797		
15	Jun01	11.53801		
16	May01	11.59357		
17	Apr01	11.65497		
18	Mar01	10.38136		

Other examples using the time series add-in function:

=spws_time_series(ticker,"trt1y","-11m","0m","down") -11m is the first period in the array.
Returns the one year total return for each of the last 12 months.

=spws_time_series(ticker,"mkvalm","0m","-11m","across") Array moves across not down.
Returns a company's monthly market value for the last 12 months.

=spws_time_series(ticker,"sale","y90","y96","down")
Returns Sales from y90 to y96.

=spws_time_series(a1,"epspx","0y","-19y","down") 0y is the first period in the array.
Returns EPS for the last 20 years for whatever ticker is in cell A1.

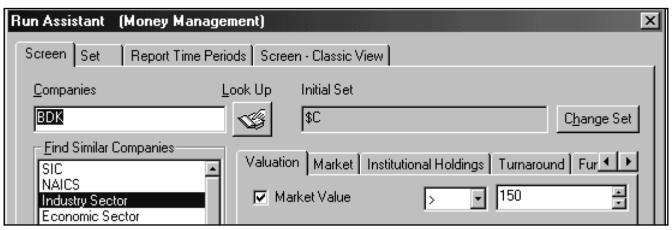
Displaying Data for a Set of Companies

The spws_set add-in function displays a data value for each member of a set of companies. With this function you can highlight a range of cells, enter a formula just once, and retrieve data for a set of companies.

=spws_set(set,"expression","array_direction")

You can use the spws_set function to compare Black and Decker's Price to Earnings ratio to its peers. To add the Price/EPS from Operations for Black & Decker's industry peers to the report:

11. Highlight cells **D7** to **D18**, enter **=spws_set(set,"conm","down")** and press **Ctrl+Shift+Enter**. (The formula only returns the name of Black & Decker until you change the set in Step 12.)
12. Click the **Run Assistant** button. **Bdk** should still appear in the **Companies** field.
13. In the Find Similar Companies list, select **Industry Sector** to search for all of the companies in Black & Decker's sector.
14. To screen out companies with a low market value, select the **Valuation** tab, click the **Market Value** check box, enter **150** in the far right field and click **OK**.
    To eliminate ADR companies from the report, under the **Population Particulars** tab, select **Non-ADR Companies**. (If the tab is not visible, click Customize, and select the tab to add it to the Run Assistant.)



The companies in the set will now populate the spreadsheet. Notice that the array has modified the range to fit the number of companies actually present in the set.

	A	B	C	D
1	BLACK & DECKER CORP			
2	701 E Joppa Rd	Towson	MD	21286-5502
3				
4				
5				
6				
7	Feb02	21.9457		BLACK & DECKER
8	Jan02	18.62443		HELEN OF TROY C
9	Dec01	15.21371		MAYTAG CORP
10	Nov01	14.93549		MESTEK INC
11	Oct01	13.34274		SALTON INC
12	Sep01	10.57627		SNAP-ON INC
13	Aug01	13.3322		STANLEY WORKS
14	Jul01	14.47797		TORO CO
15	Jun01	11.53801		WHIRLPOOL CORP
16	May01	11.59357		
17	Apr01	11.65497		
18	Mar01	10.38136		

15. To add the companies' respective Price/EPS from Operations, highlight cells **E7** to **E15**, enter **=spws_set(set,"oppe","down")** and press **Ctrl+Shift+Enter**.

BLACK & DECKER CORP	21.9457
HELEN OF TROY CORP LTD	11.08108
MAYTAG CORP	17.06411
MESTEK INC	14.49367
SALTON INC	8.381744
SNAP-ON INC	18.72283
STANLEY WORKS	21.36865
TORO CO	14.31818
WHIRLPOOL CORP	13.5072

16. To find the average of the companies' Price/EPS from Operations enter **=average(E7:E14)** in cell **E6**. To add a label, enter **Average=** in cell **D6**

Average=	15.922
BLACK & DECKER CORP	21.9457
HELEN OF TROY CORP LTD	11.08108
MAYTAG CORP	17.06411
MESTEK INC	14.49367
SALTON INC	8.381744
SNAP-ON INC	18.72283
STANLEY WORKS	21.36865
TORO CO	14.31818
WHIRLPOOL CORP	13.5072

The report you created shows that Black & Decker's Price/EPS from Operations value is higher than the industry average.

Other examples using the set add-in function:

=spws_set("$sp_500","tic","down")
Returns the tickers for the companies in the S&P 500.

=spws_set(a1,"tic","down")
Returns the tickers for the $setname located in cell A1.

=spws_set("$setname","prccm[@mnt(0y)]/epspx","across") array moves across not down.
Returns an annual price to earnings ratio for companies in the set titled $setname.

Sorting Data in a Set

The spws_set_sort add-in function sorts a set of companies based on your own criteria. You can sort a list of companies in ascending or descending order (use "a" and "d" for short in the formula.)

=spws_set_sort(set,"expression","sort variable","sort direction", "array_direction")

Now sort the set of companies in your report to look for undervalued companies based on our Price/EPS from Operations item.

18. Modify the formula in cell **D7** to **=spws_set_sort(set,"conm","oppe","a","down")** and press **Ctrl+Shift+Enter.** Now the set names have been sorted by the "oppe" item.
19. Modify the formula in cell **E7** to **=spws_set_sort(set,"oppe","oppe","a","down")** and press **Ctrl+Shift+Enter.**

Average=	14.86718
SALTON INC	8.381744
HELEN OF TROY CORP LTD	11.08108
WHIRLPOOL CORP	13.5072
TORO CO	14.31818
MESTEK INC	14.49367
MAYTAG CORP	17.06411
SNAP-ON INC	18.72283
STANLEY WORKS	21.36865
BLACK & DECKER CORP	21.9457

From the sorted list, Salton Inc. appears to be an undervalued company in this sector, and may be worthy of further research.

Screening and Backtesting

The spws_screen add-in function allows you to **backtest** an investment strategy. Spws_screen runs a saved screen in the background and returns a set of companies that pass your investment criteria for a given time period. The resulting set is ready for use in any Research Insight set function.

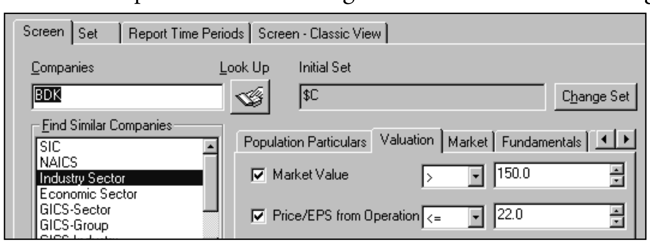
=spws_screen("screen","set","date")

For further information on how the spws_screen function can be used, you can refer to the Research Insight pre-defined report "backtest.xls" to see how you can use this function to test your stock selection theory, and compare it to the S&P 500 for relative performance.

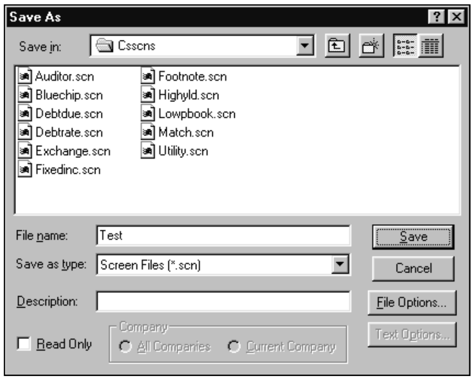
Continue the exercise with the following steps to see how the screening criteria, Price/EPS from Operations <=14 and a market value > 150 million, would have performed for Black & Decker's Industry Sector in 2001.

First create and save a screen.

20. Click the **S&P Run Assistant** button.
    The Run Assistant dialog box should still display the information you entered earlier.
21. Add the Price/EPS from Operations to the Valuation tab by clicking **Customize** and adding a new Indicator Item, **oppe**, to the **Valuation** Indicator Group. For more information on customizing indicator tabs, refer to the Customizing Screening Criteria section in Chapter 2 - Using the Research Assistant, of the *Getting Started* manual.
22. Select the **Valuation** tab, click the **Price/EPS from Operations** check box, select **<=** from the drop-down list to the right and enter **22** in the far right field.



23. Click **Save** in the Save Screen area and save the screen as test.scn to the default location.



24. Click **Cancel** in the Run Assistant dialog box to return to Excel.
25. In cell **A21**, enter **=spws_screen("test.scn","test.set","dec96")**.
    The "dec96" entry runs the test.scn screen as of December 1996 and saves the companies that passed the criteria to the set "test.set" and returns a result of "$test", which can be used in other functions. Let's see what the average one year return for this set was as of a year later, December 1997.
26. In cell **A22**, enter **=spws("*","@cavg(trt1y[dec97],"&a21&")")**.

$test
42.06376033

    This returns the average total return for the referenced set in cell A21. The part of the formula "&a21&", is an example of concatenation and is covered later in this chapter.

Display Number of Companies in a Set

This add-in function shows the number of companies in a set.

=spws_set_size("set")

27. In cell B21 enter **=spws_set_size("$test")**.
    In December 1996 only 5 companies passed the screening criteria.

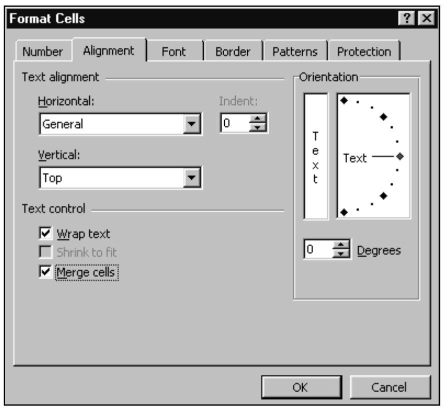
Short Business Descriptions

To complete the template, you can add a short description detailing the company's operations.

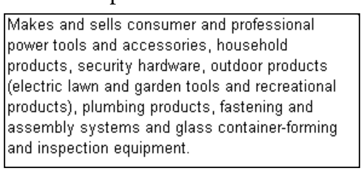
28. Highlight cells **A24** to **C34**, enter **=spws(ticker,"busdesc")** and press **Enter**. (Do not press **Ctrl+Shift+Enter**.)

    While the cells are still highlighted, format them to make it easier to read the business description.

29. Under the **Format** menu, select **Cells** select the **Alignment** tab, and select the following options: **Wrap Text**, and **Merge Cells**. Click **OK** when you are finished.



The description will be formatted for easy viewing.


Makes and sells consumer and professional power tools and accessories, household products, security hardware, outdoor products (electric lawn and garden tools and recreational products), plumbing products, fastening and assembly systems and glass container-forming and inspection equipment.

At this point you have a spreadsheet that provides pertinent information about Black & Decker and its peers, and market data with which to make knowledgeable investment decisions.

	A	B	C	D	E
1	BLACK & DECKER CORP				
2	701 E Joppa Rd	Towson	MD	21286-5502	
3					
4					
5					
6	**Period**	**Price/EPS Ops**		**Average=**	15.65369
7	Feb02	21.9457		SALTON INC	8.381744
8	Jan02	18.62443		HELEN OF TROY CORP L	11.08108
9	Dec01	15.21371		WHIRLPOOL CORP	13.5072
10	Nov01	14.93549		TORO CO	14.31818
11	Oct01	13.34274		MESTEK INC	14.49367
12	Sep01	10.57627		MAYTAG CORP	17.06411
13	Aug01	13.3322		SNAP-ON INC	18.72283
14	Jul01	14.47797		STANLEY WORKS	21.36865
15	Jun01	11.53801		BLACK & DECKER CORF	21.9457
16	May01	11.59357			
17	Apr01	11.65497			
18	Mar01	10.38136			
19					
20					
21	$test	5			
22	42.06376033				
23					
24	Manufactures and sells				
25	consumer and professional				
26	power tools and accessories,				
27	security hardware, outdoor				
28	products (electric lawn and				
29	garden tools), plumbing				
30	products and fastening and				
31	assembly systems.				

You can view the report for any of the companies in the set by selecting company from the drop-down list above the report.

Set Size = 8 | BDK - BLACK & DECKER CORP

D30 | =

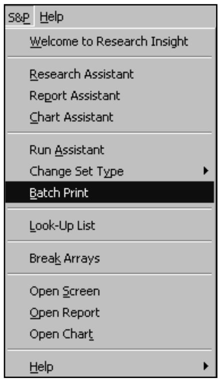
BDK - BLACK & DECKER CORP
SMG - SCOTTS COMPANY
SSD - SIMPSON MANUFACTURING INC
SWK - STANLEY WORKS
SCX - STARRETT (L.S.) CO -CL A

	A				
3					
4					
5					
6	**Period**	**Price/EPS-Ops**		**Average=**	14.63658
7	Sep98	16.51786039		BLACK & DECKER CORP	16.51786
8	Aug98	16.66666995		SCOTTS COMPANY	12.81381
9	Jul98	22.56944889		SIMPSON MANUFACTURING INC	11.93878
10	Jun98	24.20635397		STANLEY WORKS	13.64679

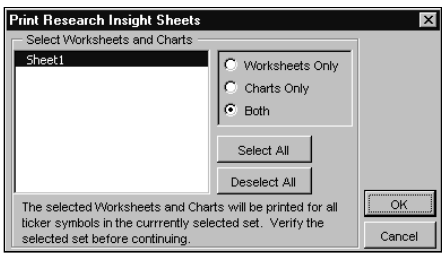
Batch Printing

Follow these steps to print the spreadsheet for all of the companies in your set.

1. Select **Batch Print** from the **S&P** menu.



2. Click **OK** in the Print Research Insight Sheets dialog box.



A separate spreadsheet will now be printed for each of the companies.

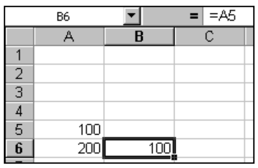
Cell Referencing

To help you save time when setting up your worksheet, this section provides a quick review of the different types of cell referencing in Excel.

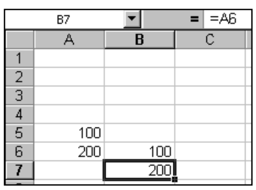
When you move a formula, the cell references within the formula do not change. When you copy a formula, absolute cell references do not change; relative cell references do change.

Relative Referencing

When you create a formula, references to cells or ranges are usually based upon their position relative to the cell that contains the formula. In the following example, cell B6 contains the formula =A5; Excel finds the value one cell above and one cell to the left of B6. This is known as relative referencing.

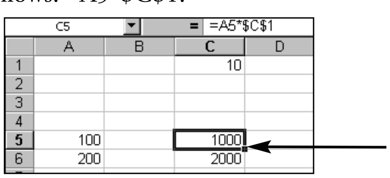


When you copy a formula that uses relative references, the references in the pasted formula update and refer to different cells relative to the position of the formula. In the following example, the formula in cell B6 has been copied to cell B7. The formula in cell B7 has changed to =A6, which refers to the cell that is one cell above and to the left of cell B7.



Absolute Referencing

If you don't want references to change when you copy a formula to a different cell, use an absolute reference. For example, if your formula multiplies cell A5 with cell C1 (=A5*C1) and you copy the formula to another cell, both references will change. You can create an absolute reference to cell C1 by placing a dollar sign ($) before the parts of the reference that do not change. To create an absolute reference to cell C1, for example, add dollar signs to the formula as follows: =A5*C1.



Cell C6 uses the formula =A6*C1

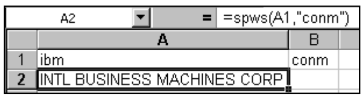
Use Cell Referencing to Re-run Reports

Referencing cells or text with an spws function offers a quick way to run a report for different tickers, mnemonics or time periods without modifying the formulas you have created each time.

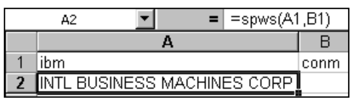
For example, if you want to evaluate the same formula for multiple companies, designate cell A1 as the “ticker symbol” entry cell, then reference cell A1 to another cell containing the formula. You can change the ticker symbol in A1 as many times as you need to, and Excel will recalculate the same formula each time you enter a different ticker symbol in A1. Following is an example:

Begin by opening a new workbook in Excel:

1. Enter a ticker in cell **A1**.
2. In cell A2 enter **=spws(A1,"conm")**.

   This formula references cell A1 for the ticker, and returns that company's name in cell A2.
3. You can also reference the mnemonic to another cell by entering **conm** in cell **B1** and changing the formula in cell **A2** to **=spws(A1,B1)**.

Adding Time Period References to a Report

Concatenation in Excel provides a shortcut to retrieve Research Insight data for specific time periods. Just "sandwich" the cell reference between quotes and an ampersand (e.g., "&cell_reference&"). In addition to the Excel syntax, notice that the formula below also contains Research Insight syntax: the square brackets indicate a time period reference in Research Insight, e.g., [Y92] indicates the 1992 annual period.

=spws(a1,""&$b4&"["&c$3&"]")

Concatenates the item   Concatenates time period reference

C4 = =spws(A1,""&$B4&"["&C$3&"]")

	A	B	C	D	E	F	G
1	mrk						
2							
3			y92	y93	y94	y95	y96
4		sale	9662.5				
5		cogs					
6		ni					
7		epspx					
8		prccm					

Enter a concatenated expression such as **=spws(a1,""&$b4&"["&c$3&"]")** in the example above, then use Excel's AutoFill feature to copy the expression for the other items in the matrix. To use Autofill, position the mouse over the lower right corner of the highlighted cell; the mouse pointer turns into a cross; drag the cell down the column.

	y92	y93	y94	y95	y96
sale	9662.5				
cogs	1805.8				
ni	1984.2				
epspx	2.12				

Calculate the items for the rest of the years by dragging the cells to the right.

	y92	y93	y94	y95	y96
sale	9662.5	10498.2	14969.8	16681.1	19828.7
cogs	1805.8	2149.2	5487.1	6993	8797.5
ni	1984.2	2166.2	2997	3335.2	3881.3
epspx	2.12	1.87	2.38	2.7	3.2

=spws(a1,"prccm[@mnt("&c$3&")]") where C$3 contains the text Y92

Concatenates a time period reference

Notice that the concatenation begins and ends with where Y92 should be inserted.

C10 = =spws(A1,"prccm[@mnt("&C$3&")]")

	A	B	C	D	E	F	G
1	mrk						
2							
3			y92	y93	y94	y95	y96
4		sale	9662.5	10498.2	14969.8	16681.1	19828.7
5		cogs	1805.8	2149.2	5487.1	6993	8797.5
6		ni	1984.2	2166.2	2997	3335.2	3881.3
7		epspx	2.12	1.87	2.38	2.7	3.2
8							
9							
10			43.375				

The following example combines text and SPWS functions:

=spws(a1,"conm")&" has "&spws(a1,"emp")&" employees"

First SPWS function   Text   Second SPWS function   Text

Excel Concatenation

A12 = =spws(A1,"conm")&" has "&spws(A1,"emp")&" employees"

	A	B	C	D	E	F	G	H
1	mrk							
2								
3			y92	y93	y94	y95	y96	
4		sale	9662.5	10498.2	14969.8	16681.1	19828.7	
5		cogs	1805.8	2149.2	5487.1	6993	8797.5	
6		ni	1984.2	2166.2	2997	3335.2	3881.3	
7		epspx	2.12	1.87	2.38	2.7	3.2	
8								
9								
10			43.375					
11								
12	MERCK & CO has 53.7999992370605 employees							

To decrease the number of decimal places for the number of employees, we need to use an Excel function within our expression as follows:

=spws(A1,"conm")&" has "&fixed(spws(A1,"emp"),3)&" employees"

SPWS Function embedded in Excel's FIXED function

A12 = =spws(A1,"conm")&" has "&FIXED(spws(A1,"emp"),3)&" employees"

	A	B	C	D	E	F	G	H	I
1	mrk								
2									
3			y92	y93	y94	y95	y96		
4		sale	9662.5	10498.2	14969.8	16681.1	19828.7		
5		cogs	1805.8	2149.2	5487.1	6993	8797.5		
6		ni	1984.2	2166.2	2997	3335.2	3881.3		
7		epspx	2.12	1.87	2.38	2.7	3.2		
8									
9									
10			43.375						
11									
12	MERCK & CO has 53.800 employees								

Chapter 10
Managing Your Databases

Standard & Poor's Research Insight is a powerful tool for creating numerous databases and groups of databases as a way of managing information within your organization. In this way, Research Insight provides you with a completely flexible database management system.

This chapter covers

- how Research Insight stores data
- database groups
- database layers
- managing databases and groups of databases
- moving databases from one group to another
- recommendations

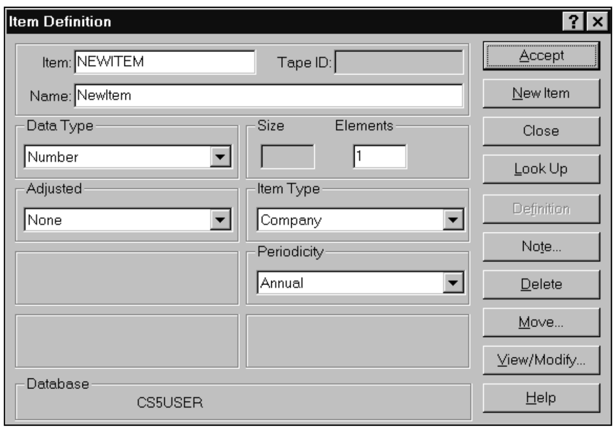
How Research Insight Stores Data

As you add information—data items, companies, concepts, currencies and the corresponding data values—Research Insight stores it in the selected **write-to database**. For example, if you are working with the COMPUSTAT (North America) database and adding your own items, the items are not actually being stored in the North America database, but in an associated write-to database on your hard drive.

Research Insight contains pre-defined, write-to databases for COMPUSTAT (North America), named CS5USER, CSPRICE and CS5NET (for network users) and for COMPUSTAT (Global) database, GV5USER, GVPRICE and GV5NET. You can also create additional databases of your own, and that is covered later in this chapter. For now, let's take a closer look at the CS5USER write-to database.

The Write-to Database

Research Insight identifies the write-to database in all of the dialog boxes used to add information. For example, if you add a data item named NEWITEM while you are working with the North America database, you will see the name of the write-to database at the bottom of the Item Definition dialog box.



New data will be added to the CS5USER write-to database.

Inside the Write-to Database

The directory where Research Insight is installed contains a sub-directory named UserData. This directory contains dictionary files to house your data items, companies and concepts. It also contains data files to house the data item values. A typical configuration looks as follows:

C:\Program Files\Research Insight\UserData\CS5UDATA.DB(A data file)

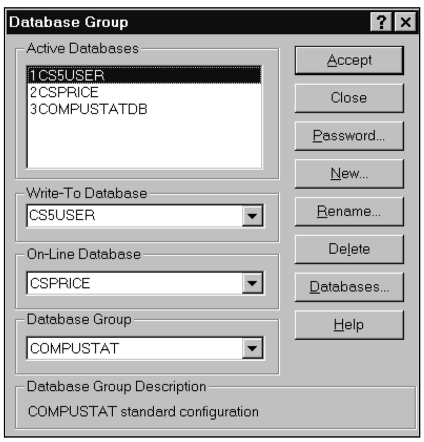
This is only a partial representation. There are multiple dictionary and data files, but Research Insight names them with the same conventions.

Selecting the Write-to Database

You can select the write-to database at any point during a Research Insight session. You can also change your selection at any time.

Begin from the Research Insight desktop:

1. From the **Databases** menu, select **Database Group** to display the Database Group dialog box.



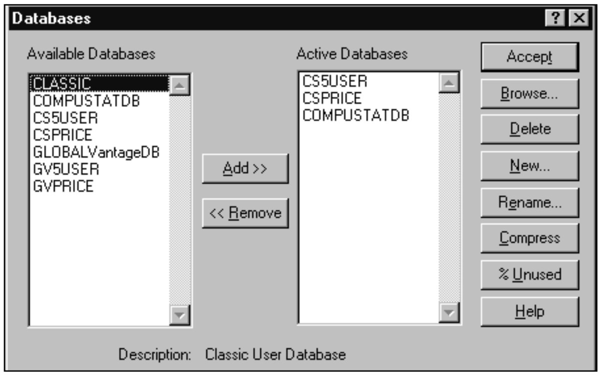
2. Select the write-to database from the **Write-To Database** drop-down list.
3. Click **Accept**.
   From this point forward, any information that you add during the current Research Insight session will be stored in the write-to database you have selected. You can change the write-to database at any time.

Creating a New Database

With Research Insight, you can create as many databases as you want. Keep in mind that you can only attach to eight databases at a time and write to one database at a time. The following instructions show you how to create a new database and select it as the write-to database.

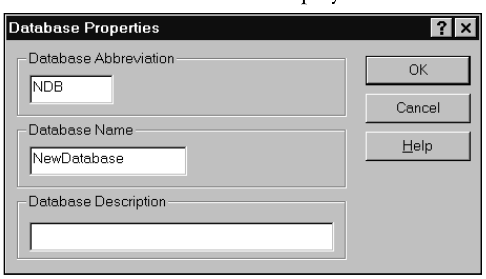
Begin from the Database Group dialog box:

1. Click the **Databases** button to display the Database dialog box.



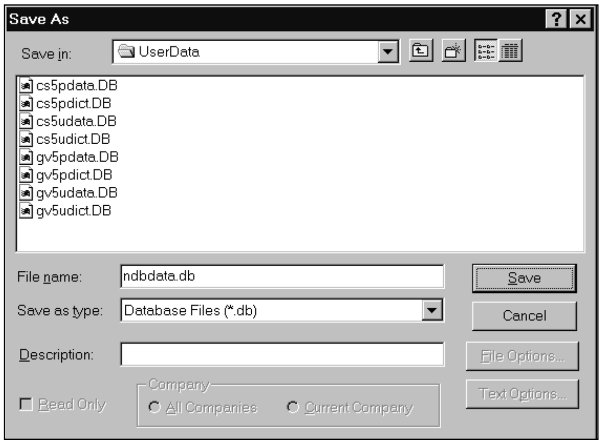
   This is the primary dialog box used for database management within the Research Insight application; it includes a listing of all Available Databases, a listing of all Active Databases in the group and buttons enabling you to add, delete, rename and compress databases. Each option is covered in detail in a later section of this chapter titled, *Moving Databases from One Group to Another*. For now, we'll use it to create a new database.

2. Click the **New** button to display the Database Properties dialog box.



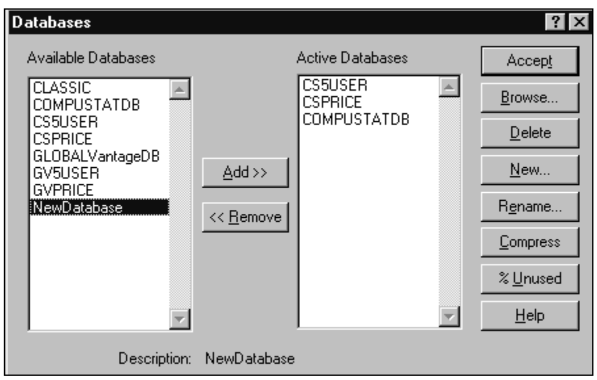
3. Enter an abbreviation for the new database (up to four characters) in the **Database Abbreviation** field.
4. Enter a name for the new database in the **Database Name** field.
5. You can also enter a description for the database in the **Database Description** field.
6. Click **OK**.

The Save As dialog box appears.



Use this dialog box to determine where you want Research Insight to locate the data and dictionary files that make up your new database. We recommend that you select the default, unless you are creating a database that will be shared on a network.

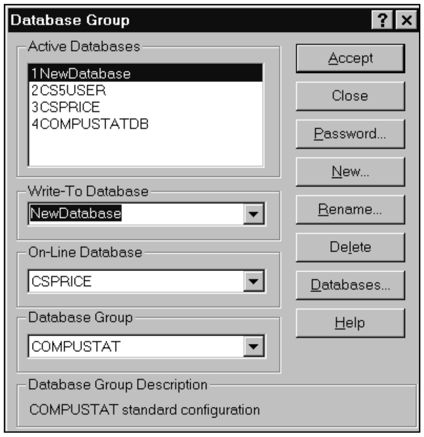
7. Click **SAVE**.
   Research Insight returns you to the Databases dialog box. Notice that your new database is highlighted in the **Available Databases** list box. Now you can add it to the **Active Databases** list box.



8. Click the **Add** button.
   Notice that Research Insight places it at the top of the list of Active Databases.
9. Click **Accept**.
   Research Insight notifies you that the write-to database is not the top database in the group and that new data may be hidden from view.

Important: Research Insight reads data in the order in which databases are layered. Refer to the section of this chapter entitled, *Understanding Database Layers* for a complete explanation of database layers.

10. Click **OK**.
    Research Insight returns you to the Database Group dialog box.
    Notice that your new database is at the top of the list of Active Databases and that the databases are numbered. This numbering sequence is explained later in this chapter.



    Now your Database Group has three available user-defined databases, NewDatabase, CS5USER and CSPRICE.
11. Select your new database as the write-to database from the **Write-to Database** drop-down list.
12. Click **Accept**.
    Research Insight returns you to the desktop. Any information you add at this point will be written to your new database. You can change the write-to database at any time.
    To learn how to create and manage multiple databases and groups of databases, continue on to the next section of this chapter.

Database Groups

Before you add information to Research Insight, first consider where you want Research Insight to store it. If you occasionally add a few data items or change a few COMPUSTAT data values, the CS5USER (or GV5USER) write-to database is probably sufficient to meet your needs. If you wish to incorporate larger amounts of data, you may want to create additional databases and groups of databases to help organized the information.

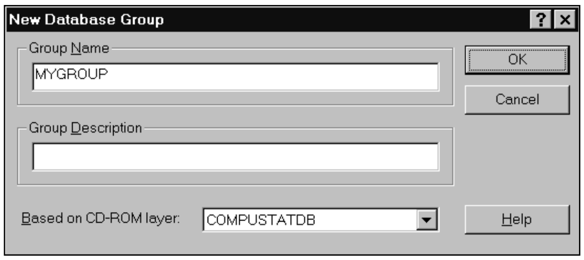
Creating a Database Group

Think of a Database Group as a collection of related databases that can be used together by Research Insight at any one time. You might create different database groups to represent different forecasting scenarios. You might create database groups as a way of managing shared information on a network. An investment banking unit could create a group to address its needs, and an analyst's group could do the same.

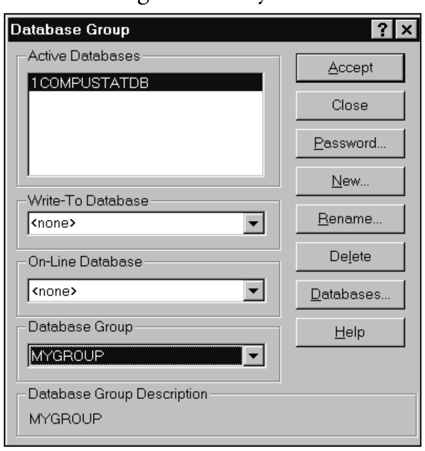
Each database group can have up to eight attached user-defined databases, and only one database in the group can be a COMPUSTAT core database (North America or Global). For illustration, the following sections use an example of adding a group named MYGROUP based on the North America core database. Follow the same basic procedures for adding a Global based group.

Begin from the Research Insight desktop:

1. From the **Databases** menu, select **Database Group** to display the Database Group dialog box.
2. Click the **New** button to display the New Database Group dialog box.



3. Select the core database you want your group to be based on from the **Based on CD-ROM Layer** drop down list. Unless you subscribe to multiple COMPUSTAT databases, you only have one selection here.
4. Enter a name for the group in the **Group Name** field.
   You can also enter a description for the group in the **Group Description** field.
5. Click **OK**.
   Research Insight returns you to the Database Group dialog box.

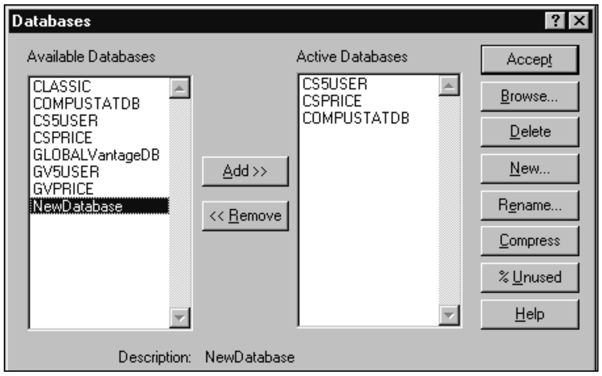


Notice that MYGROUP appears in the **Database Group** field. Notice also that the only database displayed in the **Active Databases** field is the COMPUSTATDB. At this point you will want to include one or more user-defined databases with your group. The following section shows you how.

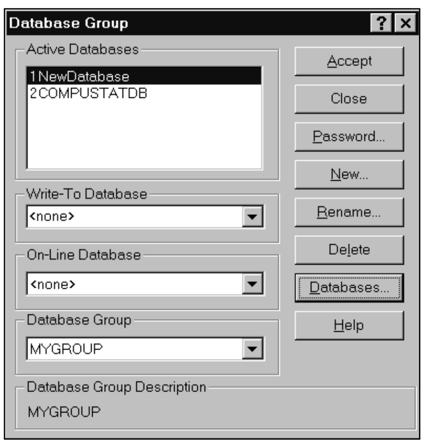
Adding Databases to a Group

Begin from the Database Group dialog box.

1. Ensure that the group that you want is displayed in the **Database Group** field.
2. Click the **Databases** button to display the Databases dialog box.



3. Use the **Add** button to add any existing, user-defined databases to your group, and/or use the **New** button to create a new database.
   We added a previously created database **NewDatabase** to the database group **MYGROUP**.
4. Click the **Accept** button.
   You return to the Database Group dialog box.



   Notice that the database you added is listed before the COMPUSTATDB database in the list of Active databases.
5. To assign the write-to database for your group, select a user-defined database from the **Write-to Database** drop-down list.
6. When you are finished, click the **Accept** button.
   You return to the Research Insight desktop.

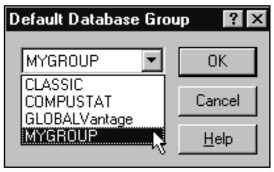
Note: You can only have one core database in a group.

Activating a Database Group

To make a database group the active group for a Research Insight session, you need to select it as the Default Database.

Begin from the Research Insight desktop:

1. From the **Databases** menu, select **Default Database** to display the Default Database Group dialog box.



2. Select the database group from the drop-down list.
3. Click **OK**.
   You return to the Research Insight desktop. The database group you selected is the active database group until you change it.

Database Layers

Within any database group you can have several user-defined databases. As a means of maintaining order in the group, Research Insight handles each database in the group as a layer. As Research Insight reads the databases for information, it reads through the layers sequentially. The top layer, number **1** in the Database Group dialog box, is the first layer that Research Insight reads.

How Data Becomes Blocked from View

Think of your group as a stack of transparencies. Each transparency has pieces of information written on it, and Research Insight views all of the information from above. Everything on the top transparency is visible. Each subsequent layer can contain both visible information and information that is blocked from view.

The points where data is blocked from view—where two transparencies directly overlap each other— is where synonymous data values for the same company (segment, issue or currency) exist on different transparencies.

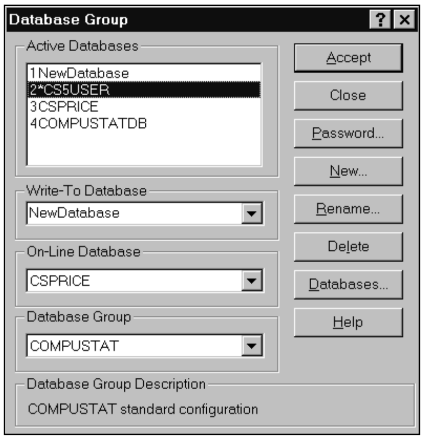
For example, suppose you have three databases—two user-defined databases on top of the North America core database. And each database contains an annual net sales value (SALE) for Sara Lee Corp. for 1997. Research Insight reads the sales value in the top database. The other two values are blocked from view. Of course, you can change the way the databases are layered, enabling Research Insight to read a different value. The following section shows you how.

Changing the Order of Database Layers

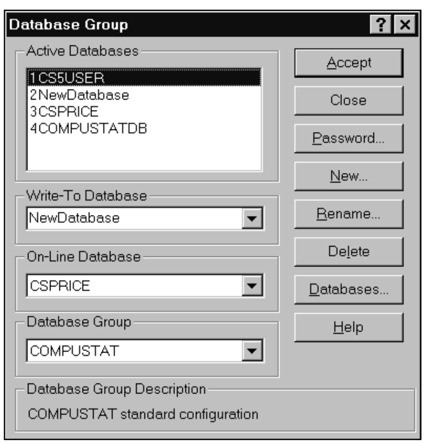
This section shows you how to change the way databases are layered in a group. The following is based on an example of a group named MYGROUP that includes three user-defined databases, named NewDatabase, CS5USER and CSPRICE and the North America core database.

Begin from the Database Group dialog box:

1. Notice that NewDatabase is the first layered database, CS5USER is the second layer, CSPRICE is the third layer and the COMPUSTATDB is the bottom layer.
2. To move CS5USER to the top layer, double click **CS5USER** so that an asterisk (*) appears.



3. Double click the first database NewDatabase. CS5USER is now number 1 and NewDatabase is number 2.



4. After moving the database, Research Insight may inform you that the write-to database is no longer the top database and new data that you add may be hidden from view. If so, click **OK**.
5. Select **CS5USER** from the **Write-To Database** drop-down list and click **Accept**.

Managing Databases and Groups of Databases

The first three sections of this chapter explained the primary elements of the Research Insight database management system: the write-to database, the dictionary and data files, the database group and database layering. This section brings all of these elements together and shows you how to manage your database group to ensure that you are storing information where you want to store it and to ensure that Research Insight is reading the information that you want it to read.

A Graphical Representation

The following illustration is a graphical representation of a typical database group. The remainder of this section refers to this illustration, so take a moment to look it over.

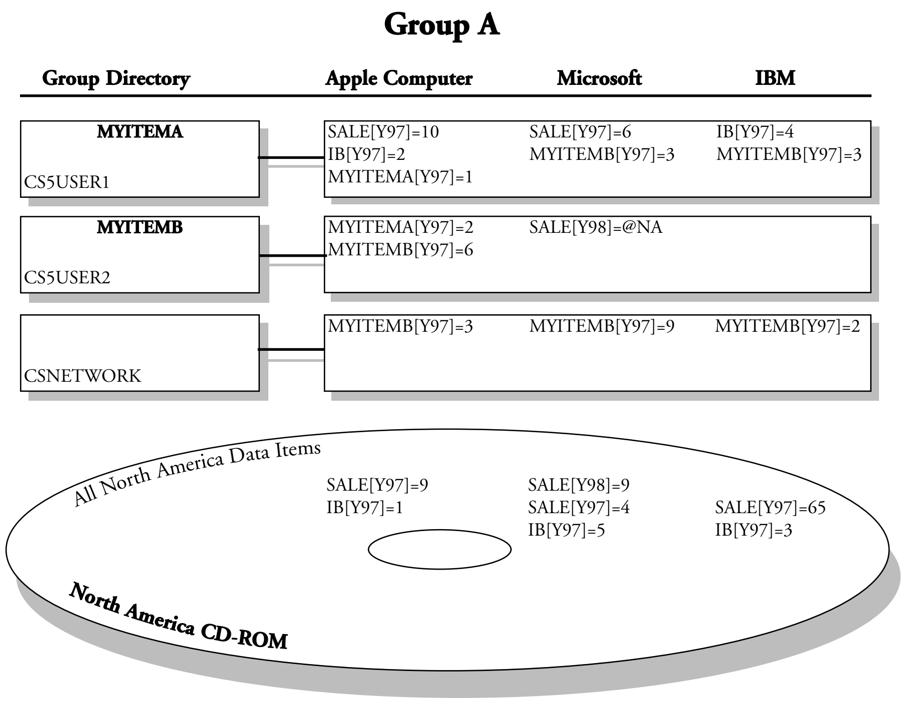


Figure 1

Notice that Group A contains four databases. CS5USER1 and CS5USER2 are both user-defined databases stored locally. CSNETWORK is a user-defined database stored on a network location and shared by multiple users. The North America core database is the fourth database (COMPUSTATDB).

Definitions versus Values

If you look at Figure 1, you'll see that each database is broken into a dictionary component, on the left side, and a component where data values are actually stored, on the right. The reason for this is that you can add a definition for an item in one database, and add and store the associated data values in a different database. This is the case with the data item named MYITEMA, which is defined in the CS5USER1database, but has an associated value for Apple Computer stored in CS5USER2.

The Group Dictionary

The Group Dictionary contains definitions for all data items, companies, segments, issues, concepts and currencies in the group. For Group A, the dictionary includes all North America definitions, and the definitions for MYITEMA and MYITEMB. All of these definitions—primarily items and companies—are available as long as you are working with Group A in its current state.

Keep in mind that if you remove the CS5USER1 database from Group A, MYITEMA is removed from the dictionary, and you will not be able to access MYITEMA in any Research Insight operation. Even though there is a value for MYITEMA for Apple Computer in the CS5USER2 database, you cannot access the value without having the definition available. This is an important point to keep in mind as you work with the Research Insight database management system.

How Research Insight Reads Data

Research Insight reads data from the databases in a group as if they were stacked or layered, one on top of another. Research Insight searches the databases for data sequentially, from the top database through to the bottom database, stopping at the first occurrence of a value. Remember that the bottom database is always the CD-ROM database.

Based on the current configuration of Group A in Figure 1, Research Insight returns the following values for each of the items listed below:

	Apple	Microsoft	IBM
SALE[Y98]		@NA	
SALE[Y97]	10	6	65
IB[Y97]	2	5	4
MYITEMA[Y97]	1		
MYITEMB[Y97]	6	3	3

If you removed the CS5USER2 database from the group, Research Insight would return the following values:

	Apple	Microsoft	IBM
SALE[Y98]		9	
SALE[Y97]	10	6	65
IB[Y97]	2	5	4
MYITEMA[Y97]	1		

Notice that as you remove CS5USER2 you also remove the definition for MYITEMB. Because of this, Research Insight cannot access any of the MYITEMB values in the CSNETWORK and CS5USER1 databases. To enable Research Insight to access the MYITEMB values, simply return the CS5USER2 database to the group.

Note: You can manually enter an @NA (not available code), or calculate an @NA or @NC (not calculated) in a user-defined database, and they act as any other user entered value. These hard entered codes block values in lower database layers. For example, in Group A (see Figure 1) the user has entered a hard @NA for SALE for Microsoft in 1998. This blocks the North America value of 9 for SALE in 1998. If the CS5USER2 database is removed from the group, the North America value is visible.

How Layering Affects the Write-to Database

Within any one group, you can select one user-defined database to be the write-to database. The write-to database is where new information is added and stored. Although only one database can be the write-to database at any one time, you can change this assignment at any point during a Research Insight session.

When you are assigning the write-to database for your group you should consider the impact of layering. If the write-to database is not the top layer, new data that you add may be blocked from view. This depends on whether or not a synonymous data value is in an upper database layer.

Research Insight is flexible enough to write to any database that you choose, regardless of layer. And you can change the way the databases are layered at any time, enabling Research Insight to read a different value. But, as a rule of thumb, it's a good idea to move your write-to database to the top layer before you begin adding or modifying information.

Collisions

A previous section of this chapter, titled *Definitions versus Values*, explained the difference between definitions and values. To summarize, definitions are primarily the records of data items, such as sales and assets, and the records of companies, such as Apple Computer and IBM. (They are also the records of segments, issues, currencies and concepts. Values are the actual figures that Research Insight contains, including the data item values for each company, for each time period.

Research Insight can contain synonymous data values. It cannot contain duplicate definitions. For example, a company can only reside in the database once. Likewise, an item definition, such as SALE, can only have one occurrence.

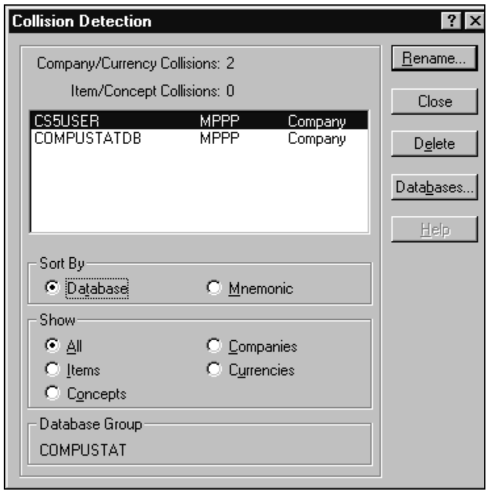
You can, of course, define an item that is similar in meaning to an existing item. But you must give it a unique mnemonic. For example, if you define sales differently than it's defined in the North America database, you could add an item with the mnemonic MYSALE.

A collision occurs when Research Insight identifies two occurrences of the same definition in the active Database Group. This can occur for companies, data items, concepts and currencies. For instance, it may occur if you add a company to Research Insight, and we subsequently add the same company. Or, it may occur if you use the same mnemonic for two different data item definitions stored in separate user-defined databases. These two situations are explained below with examples.

What Happens when a Company I Previously Added is Added to the COMPUSTAT database?

Suppose you add a company to the CS5USER database, and at some point in the future we add the same company with the same unique identifier (ticker) to the North America database.

If you attempt to open a group with both the CS5USER database and the North America database, Research Insight notifies you of a collision. This notification typically occurs at startup, provided you closed a previous session with this database configuration. It can also happen when you try to create this database configuration within the Databases dialog box. In either situation Research Insight displays the Collision Detection dialog box shown below. MP3.COM Inc is used as an example.

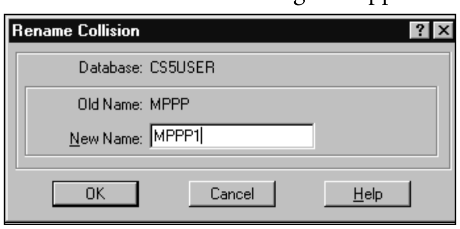


At this point, you have two options:

- Delete your MP3.COM company and all of its associated data.
- Rename your MP3.COM company. This enables you to keep it in the same group with the North America database's MP3.COM.

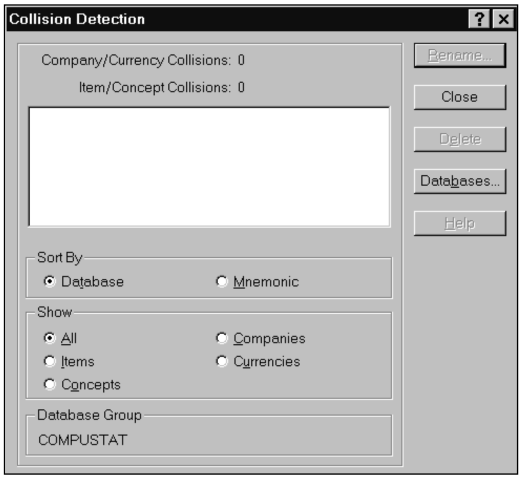
Note: If you activated collision detection from the Databases dialog box rather than at startup, you have a third option. You can remove the database causing the collision from the active group. To do this, just close the Collision Detection dialog box and return to the Databases dialog box.

1. To rename your company, click **Rename** in the Collision Detection dialog box.
   The Rename Collision dialog box appears.



2. Enter a new ticker for your company in the **New Name** field.
   For example, you might change **MPPP** to **MPPP1**.
3 Click **OK**.

Research Insight returns you to the Collision Detection dialog box showing that the collision has been resolved.

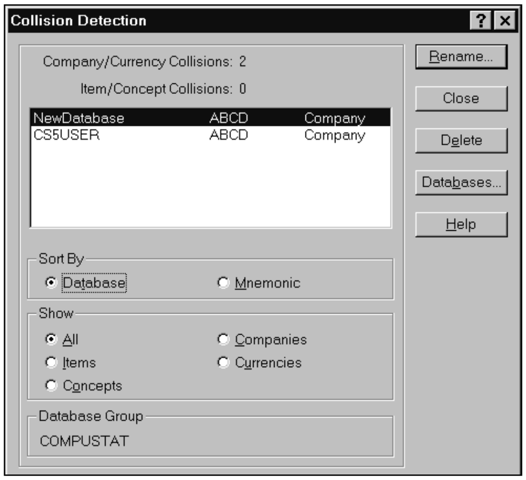


4. Click **Close**.

Note: If you have several collisions, Research Insight provides you with a quick way to resolve all of them at once. It's called Collision Append. To do this, use the **Shift** or **Control** key to select all of the colliding items. The **Rename** button changes to **Append**. Click **Append** and add a character extension to each colliding item.

What Happens if I Use the Same Mnemonic for Two Different Data Items?

Suppose you add a data item with the mnemonic ABCD to the CS5USER database. And, at some point in the future, you add a new item to a different database with the same ABC mnemonic. If you attempt to open a group with both of these user-defined databases, Research Insight notifies you of a collision. This notification takes place from within the Databases dialog box. When you click the **Accept** button Research Insight displays the Collision Detection dialog box.



At this point, you have two options:

- Delete one of the ABCD items. Doing so also deletes that item's associated data.
- Rename one of the ABCD items. This enables you to keep it in the same group with the other ABCD item.

Note: If you activated collision detection from the Databases dialog box rather than at startup, you have a third option. You can remove the database causing the collision from the active group. To do this, just close the Collision Detection dialog box and return to the Databases dialog box.

1. To rename one of the items, click **Rename** in the Collision Detection dialog box. The Rename Collision dialog box appears.
2. Enter a new name for one of the items.
3 Click **OK**.
Research Insight returns you to the Collision Detection dialog box showing that the collision has been resolved.
4. Click **Close** to return to the Database Group dialog box.

Note: If you have several collisions, Research Insight provides you with a quick way to resolve all of them at once. It's called Collision Append. To do this, use the **Shift** or **Control** key to select all of the colliding items. The **Rename** button changes to **Append**. Click **Append** and add a character extension to each colliding item.

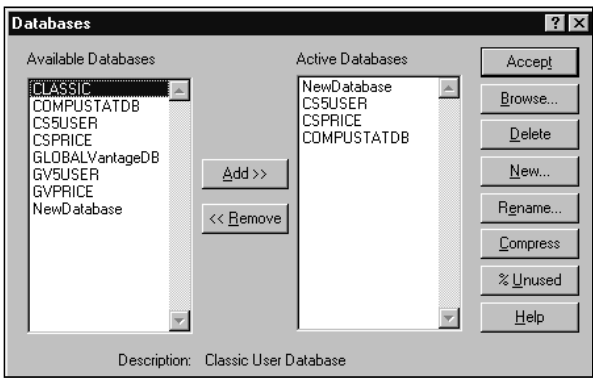
Moving Databases from One Group to Another

We designed Research Insight to be a completely flexible database management system. With such a flexible system, responsibility is placed on the user to make reasonable decisions. What follows is an explanation of the ways you can reasonably move databases and groups of databases and still maintain order.

Since all database moves are accomplished with the Databases dialog box, this section begins with an explanation of all of the features in that dialog box. Subsequent sections explain the ways you can and cannot move databases.

The Databases Dialog Box

The Databases dialog box is the primary dialog box used for database management. You can access this dialog box from within the Databases Group dialog box (from the **Databases** menu, select **Database Group,** then click the **Databases** button.) The Databases dialog box is shown below.



The Available Databases field identifies all user-created and subscription databases in the Research Insight system. The Active Databases field identifies only those databases in the selected group.

The Databases dialog box contains several buttons explained below:

Add and Remove

Use the Add and Remove buttons to bring databases in and out of the group of active databases.

Accept

Use the Accept button to register the group configuration with
Research Insight.

Browse

Use the browse button to locate additional databases stored on network sites.

Delete

Use the Delete button to permanently remove a database and all of its definitions and associated values from Research Insight. Make certain that this is what you want to do. Once selected, there is no way to undo it.

Warning: You cannot undo Delete once you have selected it.

New

Use the New button to create and name a new database.

Rename

Use the Rename button to change the name and description of an existing database.

Compress

Use the Compress button to optimize the resources used by a database. Also, use compression to identify any orphan data within the database.

%Unused

Use the %Unused button to determine how much disk space a database is using and to determine if your database needs to be compressed.

Moves that Create Orphan Data

As you move databases in and out of groups, and definitions from database to database, it's possible to create a situation where you have orphan data. Orphan data is data that doesn't know where its associated definition, or parent, is located. To prevent this from occurring, we recommend that you keep a definition and its associated data values in the same database.

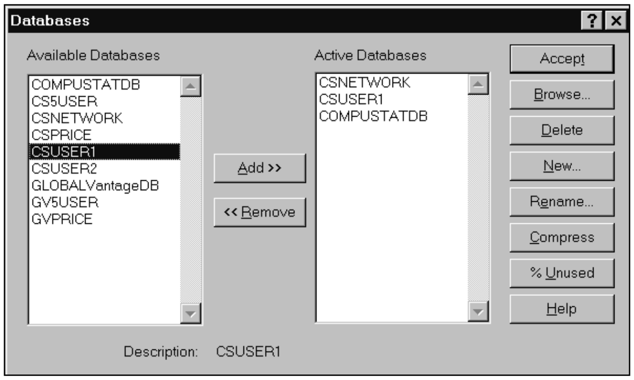
Orphans are created any time the database with the definition and the database with the values are not in the same group. Returning to Figure 1, consider the following example:

Suppose you are working with a database group configured similarly to Group A in Figure 1. You decide to move the CSUSER2 database out of the group. In doing so, the MYITEMB data values in the CSNETWORK and CSUSER1 databases are orphaned. Research Insight notifies you of this if you compress the CSNETWORK or CSUSER1 databases.

Compression and Orphan Detection

Begin from the Databases dialog box:

1. Highlight the **CSUSER1** database in the **Available Databases** list box.



2. Click the **Compress** button.
   Research Insight compresses the CSUSER1 database. In doing so, Research Insight also examines the CSNETWORK database for orphan data.

   Research Insight notifies you that the MYITEMB values are orphaned and that a possible parent definition exists in the CS5USER2 database. Research Insight makes this notification with the following dialog box:

   Notice in the Possible definition layer field that Research Insight identifies the database by name as well as the name of the person who created it.

At this point, you have three options:

- Ignore the situation, and simply be aware of the orphan data. Click the **Ignore** button to take this course.
- Permanently delete the orphan data. Click the **Delete Data** button to take this course.
- Reattach the CSUSER2 database to Group A so that the MYITEMB values have a parent MYITEMB definition.

3. To reattach the CS5USER2 database to Group A, click the **Cancel** button in the Orphaned Data dialog box. This closes the Orphaned Data dialog box and returns you to the Databases dialog box.
4. Use the **Add** button to return the CSUSER2 database to Group A.
   After doing so, the MYITEMB values are accessible once again.

Recommendations

The Research Insight database management system is an extremely flexible tool which enables you to do virtually anything that you want. However, with such flexibility comes responsible management.

The purpose of this chapter was to explain what you can reasonably do with Research Insight and still maintain order in your system. As a means of summarizing this chapter, we make the following recommendations:

- Create as few databases as necessary
- Store definitions in the same databases as their associated values. (This minimizes the chance of orphan data.)
- Attach no more than eight databases to the active group

In network situations:

- Only one or two people should write-to or make any changes to shared, user-defined databases. (Refer to Chapter 11 - Sharing Databases on a Network.)
- Make large scale changes to shared databases during off hours, or inform users to temporarily detach from a database so that changes can be written to it.
- Inform users to make changes to their databases to resolve collisions with network databases.

By adhering to these recommendations, you can realize the full potential of the Research Insight database management system.

Chapter 11
Managing Core Database Downloads

Research Insight versions 7.7 and higher offer automated delivery of the COMPUSTAT core databases over the Internet through the Database Manager application. The Database Manager lets you control when the core databases are downloaded and where they are stored on your system.

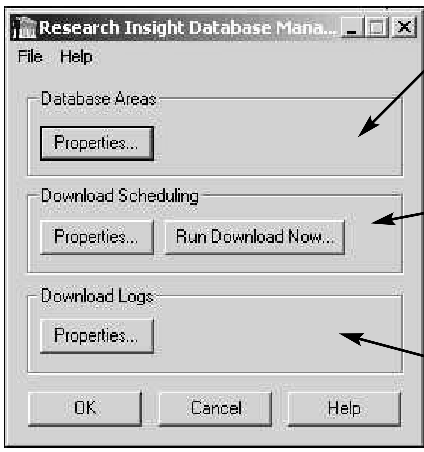
This chapter covers

- managing core database downloads
- specifying the location of the Database Manager
- enabling/disabling the Price History Database
- adjusting cache size

Managing Core Database Downloads with the Database Manager

Research Insight offers the convenience of automated electronic delivery of the COMPUSTAT core databases. The Research Insight Database Manager allows you to control the download schedule and the location where the databases will be stored.

You can open the Database Manager from the Windows desktop (Select **Start > Programs > Research Insight > Research Insight Database Manager**) or through Research Insight Properties.



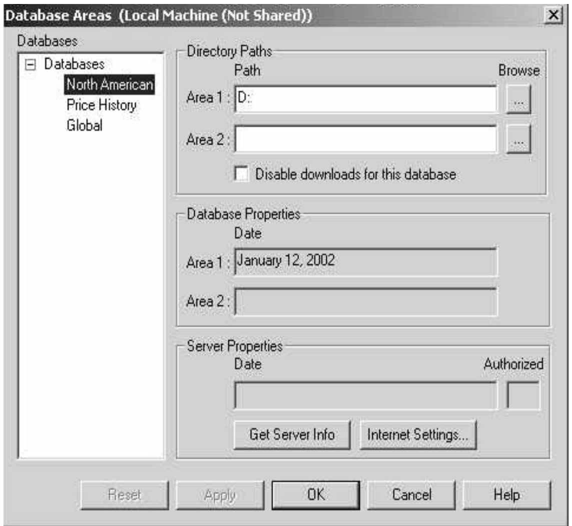
Database Areas
Verify the Databases, the Directory Paths, the Database Properties and the Server Properties for your subscription database(s).

Downloading Scheduling
Schedule the database downloads and verify the database(s) you wish to download.

Download Log
Review a detailed report of the download(s) from both the Standard & Poor's server side (sender) and your company's side (recipient).

Verify the Database, Directory Paths and Server Properties

From the Database Manager dialog box, click the **Properties** button under Database Areas to open the Database Areas dialog box. Here you can select the Database, the Directory Paths, the Database Properties and the Server Properties for your subscription database(s).



Select a Database

Each database you subscribe to is listed in the Databases area. Select one of the databases from the list.

Enter the Path to the Database

Under the Directory Paths area

1. **Area 1** and **Area 2** contain the location of the database on your hard drive or your company's computer network. Enter the location for Area 1 and/or Area 2 in the respective text boxes or use the **Browse** buttons to navigate to the correct hard drive or network location. An example of the path for Area 1 is *x:/SpShare/North American/Area 1*, where *x:/*represents your network drive. Click **Apply** to confirm the change.
2. Click the **Disable downloads for this database** checkbox if you do not want to automatically download the next update to the selected database.

Choose the Database Version

The Database Properties area shows the date the databases on your hard drive or computer network were last updated. The dates reported in Area 1 and Area 2 correspond to the database locations under the Directory Paths area. By default, Research Insight retrieves data from the most recent database available. If you want to use data from an older database, delete the path in Area 1 or Area 2 under Directory Paths that corresponds to the newer database.

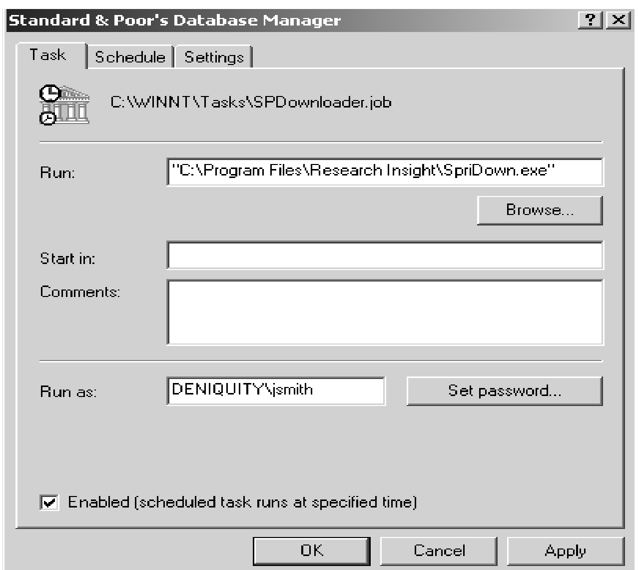
Check the Database Version Available for Download and Select Internet Settings

Under Server Properties, you can verify the date of the databases available for download on the Standard & Poor's server, as well select your Internet settings.

1. Click the **Get Server Info** button to see current information for the database selected in the Databases dialog box. The Date field indicates the date of the database available on the server to be downloaded. The Authorized field indicates with a "Yes" or a "No" whether or not you have authorization to download the database .
2. Click the **Internet Settings...** button to open the Internet Settings dialog box. In the **Host Settings** area, enter your Research Insight Username and Password. In the **Proxy Settings** area, enter your Internet Username and Password. In the **Proxy URL** field, enter the URL that you access the internet by through your company's computer network firewalls.
3. Click **OK** in the Database Areas dialog box.

Schedule Database Downloads

From the Research Insight Database Manager dialog box, click the **Properties** button under Downloading Scheduling. In the Standard & Poor's Database Manager dialog box you can locate the Downloader executable program, schedule downloads and change the parameters for the downloads.



Locate the SpriDown.exe file and Enter Your User Name and Password

The Task tab reports the default location of the program (SpriDown.exe) needed to download the databases from the Standard & Poor's server. You also need to enter your Domain\Username and Password in the **Run as** field. Click the **Set Password** button to set up your unique password for downloading the COMPUSTAT database(s). (Windows 98 does not require this entry.)

Schedule the Download

The time, frequency and starting date of the database download is reported at the top of the Schedule tab.

We recommend using the default schedule which is to download the databases daily.

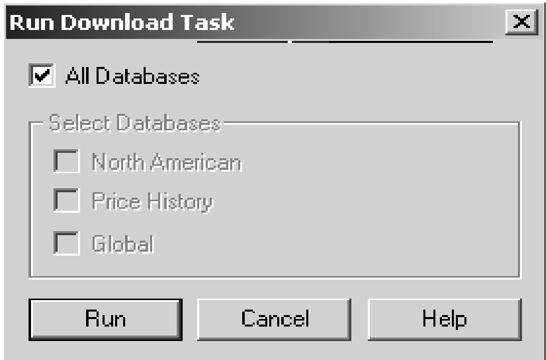
Adjust Settings for More Efficient Downloads

The Settings tab is divided into three main areas: Scheduled Task Completed, Idle Time and Power Management. The settings here are designed minimize any interference the download(s) may have with other projects and/or tasks you need to accomplish during your workday.

1. In the **Scheduled Task Completed** area, you can check *either* of the two options.
2. Use the **Idle Time** area to direct the Database Manager to complete a database download when you will be away from your computer for awhile. Select the **Stop the task if the computer ceases to be idle** box to ensure that the database download does not interrupt other priorities that you have during that time.
3. The **Power Management** area provides several options to coordinate the database download with your computer's energy resources. Check all that apply.
4. When information contained on ALL tabs is correct, click **OK** to accept your changes.

Run the Download Immediately

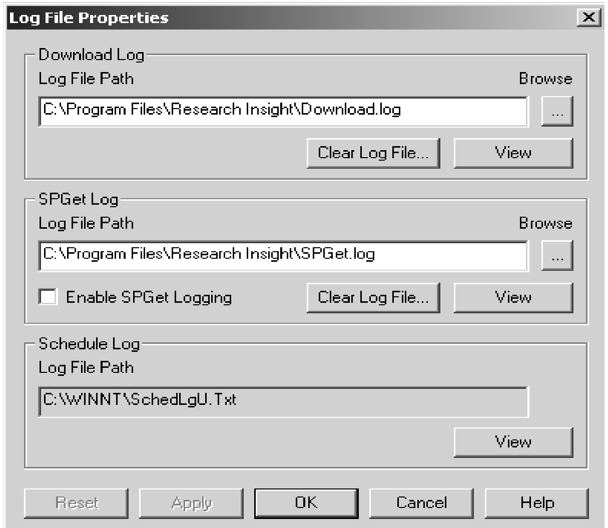
If you want to download the databases now, instead of scheduling the download later, click the **Run Download Now** button in the Research Insight Database Manager dialog box. In the Run Download Task dialog box you can select the database(s) you wish to download.



1. Click the **All Databases** checkbox if you wish to download all of the databases (COMPUSTAT, Global and/or Price/History) that you subscribe to.
   OR
   Select the appropriate database(s) in the **Select Databases** area if you want to only download a specific database(s) at this time.
2. Click **Run**.

Review a Detailed Report of your Database Downloads

Within the Download Logs area of the Research Insight Database Manager dialog box, click the **Properties** button to open the Log File Properties dialog box and review a report of the download(s) from both the Standard & Poor's server side and the recipient's side.



For a synopsis of the database download activity on the server, under the Download Log area:

1. In the **Log File Path** field, enter the location of Download.log on your hard drive or network drive. If unsure of the path, click the **Browse** button and navigate to the correct location.
2. Click the **View** button to review the Download.log, a text document that reports the sequence of events for the database download.
3. Click the **Clear Log File** button to delete the information in the Download.log document.
4. Click **Reset** if information input is not satisfactory. The Log File Properties dialog box information will revert to what it contained when first opened or since the last time the Apply button was selected, whichever is most recent.
5. Click **Apply** if all information within the dialog box is satisfactory.

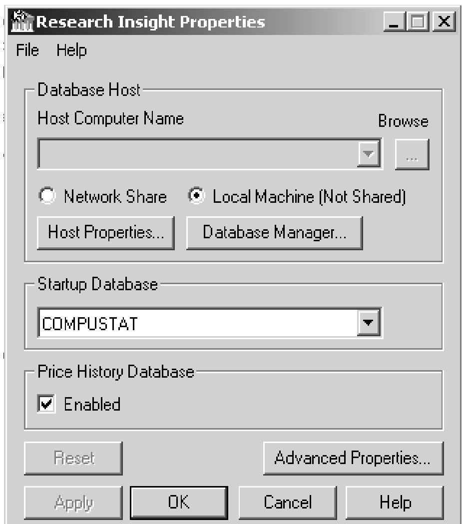
The SPGet.log option offers a more detailed report of the database downloads. Select the Enable SPGet Log checkbox for this option.

The Schedule Log area of the dialog box provides a short cut to your operating system task scheduler view log.

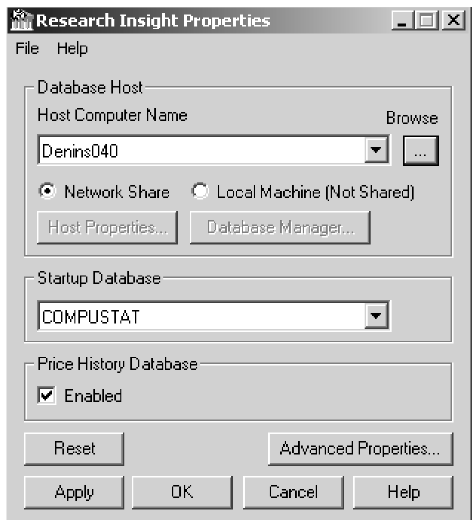
Specifying the Location of the Database Manager through Research Insight Properties

The Research Insight Properties application allows you to set up the Research Insight database(s), specify the location of the Database Manager and manage the database(s) downloads through the Database Manager, verify the Default Database in Research Insight and enable/disable the Price History database. To open this application, on the Windows desktop select **Start > Programs > Research Insight > Research Insight Properties**.

Important: For the Database Manager to automatically download the latest Core Database images, Windows Task Scheduler must be installed on the computer from which the Database Manager schedules the downloads. The Windows Task Scheduler is included in the installation of Internet Explorer 5.0 or higher. (We recommend closing all applications before performing any software installations. If you need to reboot after the installation you will be prompted to do so.)



Database hosted locally



Database hosted on the network

Choose a Network or Local Computer to Host the Database Files

Under the Database Host area, specify the location of the machine that hosts the database files.

Select either the **Network Share** radio button (the database is shared by a group of users) or the **Local Machine (Not Shared)** radio button (the database is used by an individual only).

If you select the Network Share radio button, the **Host Computer Name** field identifies the network computer that hosts the Database Manager (e.g., denins040_xxx). This field is grayed out when the Local Machine (Not Shared) radio button is selected.

Access the Database Manager

You can open the Database Manager through Research Insight Properties to view or change the Databases, the Directory Paths, the Database Properties and the Server Properties.

To view settings in the Database Manager, click the **Host Properties** button.
To change settings in the Database Manager, click the **Database Manager** button.

To schedule database downloads, click the **Properties** button in the Download Scheduling area.

To verify the database(s) you will download, click the **Run Download Now...** button in the Download Scheduling area.

To review a detailed report of the download(s) from both the Standard & Poor's server side and your side (recipient), click the **Properties** button in the Download Log area

Select the Default Database in Research Insight

You can select the default database you wish to use for your analysis prior to opening Research Insight. In the **Startup Database** area of the Research Insight Properties dialog box, select the desired database from the drop-down menu. The COMPUSTAT database should be selected by default for Research Insight (North America) users.

Reset the Properties

Click the **Reset** button to revert all settings back to the way they were before the last time you selected the Apply button or when you first opened the dialog box, whichever is most recent. The **Reset** button will be grayed-out if you have not made any changes in Research Insight Properties.

Enabling/Disabling the Price History Database

If you are a Price History Database subscriber you can enable this database by selecting the **Enable** checkbox in the Price History Database area of the Research Insight Properties dialog box. Disable the database by de-selecting the checkbox.

Adjusting Cache Size

The Cache is the amount of memory reserved to complete calculations within the Research Insight application. You can adjust the Cache Size for each database you subscribe to by clicking the **Advanced Properties** button to open the Advanced Properties dialog box. To revise the cache size, select a database from the drop-down list, enter the new amount in the **Cache Size** field and click **Apply**. Click **OK** to close the window.

Chapter 12
Sharing Databases on a Network

With Standard & Poor's Research Insight, you can share databases that you create on a network just as you can share subscription databases. User-defined databases can also be accessed by multiple users simultaneously and new information is available to all network users as it is being written to speed the flow of customized financial and market information through your organization.

This chapter covers

- simultaneous access
- changing concepts in a network environment
- write-to privileges and passwords
- recommendations

Simultaneous Access

Research Insight provides simultaneous access to user-defined databases, allowing information to be shared by several people at the same time. Generally, you can continue to read a database while someone else is writing changes to that database.

Although simultaneous access is possible, you should try to avoid writing to databases that are in use. If user A is running a report or screening the database for a specific data item, and user B is changing values for the same data item, user A may see all, some or none of the changes. It's all a matter of timing.

We recommend that changes be made to shared, user-defined databases during off hours, or that users be informed to detach from a database temporarily so that changes can be written to it. Taking this approach ensures that everyone has access to the same data.

Note: Although information can be accessed as it is written, it will not be visible in the **Look Up** list. The **Look Up** list has to be closed and re-opened after the addition of information for the information to be visible.

Changing Concepts in a Network Environment

Research Insight allows you to change or delete any pre-defined COMPUSTAT concept. However, before you edit a concept that is shared in a network environment, consider how the write-to database impacts the change.

If you want to change a concept definition and make the change available to everyone on the network, the write-to database must be a shared network database. (Generally, this database is named CS5NET.)

Alternately, if you want to change a concept for your personal use while leaving the network definition unchanged for everyone else, the write-to database must be your own private database (generally named CS5USER), and you must rename the concept and save it with the new name. If you do not rename the concept, Research Insight removes the old definition from the network dictionary because there cannot be two definitions for the same concept. The definitions collide. Unfortunately, once Research Insight resolves this collision, the other network users are left without a concept because they cannot access your private database where the concept is now stored.

It is always good practice to rename any concept that you change and save the concept with the new name. That way, the original COMPUSTAT concept and its definition is always available for future use.

Refer to Chapter 10 - Managing Your Databases for a complete explanation of the write-to database.

Write-to Privileges and Passwords

Research Insight has a password feature that allows you to limit access to the Database Group dialog box (shown on the next page). Without the password, a user cannot change the write-to database or the database configuration of any group. The password feature can be used by individuals to protect their own databases, and it can be used by network administrators to limit write-to privileges to one or two users.

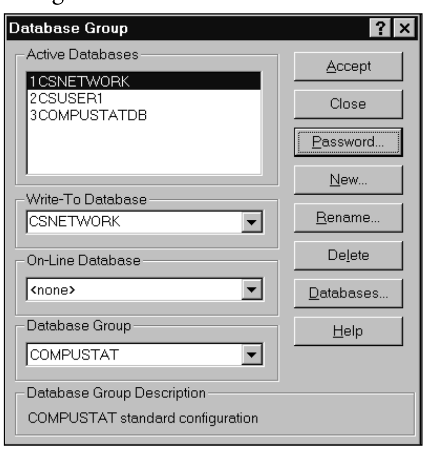
To use the password to limit access to network databases, the network administrator needs to enter the password on each workstation site. Keep in mind that passwords are not fail-safe, and they are not meant to replace a sound network management policy.

Note: Regardless of password protection, it is possible for individual users on a network to delete, rename or move information contained in network databases with the Collision Detection feature of Research Insight. Users should be advised against doing so. Instead, to reconcile collisions, users should be advised to make the necessary changes to their own databases.

Adding a Password

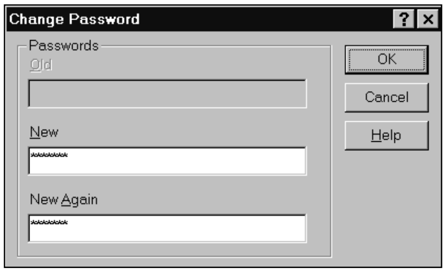
Begin from the Research Insight desktop:

1. From the **Databases** menu, select **Database Group** to display the Database Group dialog box.

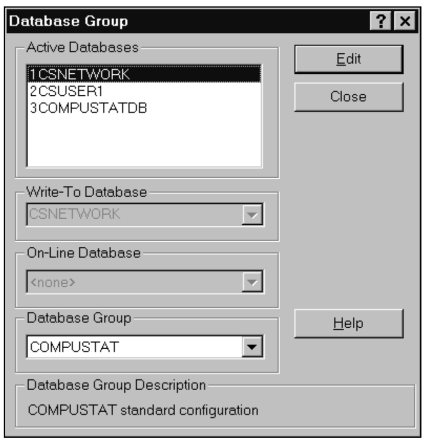


2. Click the **Password** button.

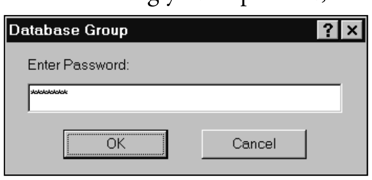
The Change Password dialog box appears.



3. Enter a password in the **New** field. (Note: passwords are case-sensitive.)
4. Repeat the password in the **New Again** field.
5. Click **OK**.
   The Database Group dialog box appears again.
   After you close the Database Group dialog box and return to it at any point in the future, you will see the following:



Any time you click **Edit** in this dialog box, Research Insight first asks you for a password before allowing you to proceed, as shown below.



Without the password, users cannot change the write-to database or proceed to the Databases dialog box.

Changing a Password

Begin from the Database Group dialog box:

1. Click **Edit**.
   Enter your old password in the **Enter Password** field and click **OK**.
   The Database Group dialog box appears.
2. Click the **Password** button.
   The Change Password dialog box appears.
3. Enter your old password in the **Old** field.
4. Enter your new password in the **New** field.
5. Reenter your new password in the **New Again** field.
6. Click **OK**.
   Your password has been changed.

Deleting a Password

Begin from the Databases Group dialog box:

1. Click **Edit**.
   Enter your old password in the **Enter Password** field and click **OK**.
   The Database Group dialog box appears.
2. Click on the **Password** button again.
   The Change Password dialog box appears.
3. Enter your old password in the **Old** field.
4. Click **OK**.
   Your password has been deleted.

Recommendations

As is the case with all networked systems, Network Management must establish clear policies and inform all users of those policies. On that note, we make the following recommendations for managing shared, user-defined databases on a network:

- Only one or two people should write to or make any changes to shared, network databases.
- Make large scale changes to databases during off hours, or inform users to temporarily detach from a database so that changes can be written to it.
- Store definitions and their associated data values in the same database. (This minimizes the chance for orphan data.)
- Attach no more than eight databases to a group.
- Inform users to make changes to their databases to resolve collisions with network databases.

- Create as few databases as possible. (Research Insight has pre-defined, user databases for network users. The databases are named CS5NET for the COMPUSTAT (North America) database and GV5NET for COMPUSTAT (Global)
- Backup your user databases on a regular basis.
- Backup concepts for users and networks.

These recommendations allow you to enjoy all of the benefits of sharing user-defined, Research Insight databases, while minimizing the potential for problems common to network systems.

Chapter 13
Daily Updates, Earnings Estimates and Value-Added Data

Research Insight offers a wide variety of data that can be downloaded from the internet and and incorporated in the write-to database. The Research Insight Task Scheduler allows you to schedule regular downloads in order to take advantage of the most current data available.

Note to network users: Only Network Administrators should use this feature.

This chapter covers

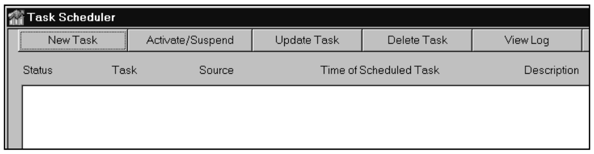
- downloading data from the Internet with the Research Insight Task Scheduler
- additional data available through Internet download
  —Daily Market and Fundamental Data
  —Earnings Estimates
  —Value Added Data
    Economic Data
    Historical NAICS
    Index Fundamentals
    Insider Trading
    Institutional Ownership
    IPO Date
    Sector Data
    Short Business Description
    Value/Growth Indicator

Downloading Data from the Internet

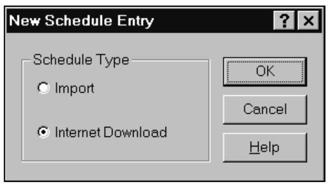
The Research Insight Task Scheduler keeps the COMPUSTAT core database refreshed with current market and fundamental data, earnings estimates, and updates to the Value Added data download. The previous day's data is available for download after 4:00 a.m., EST.

To schedule an Internet download, begin from the Research Insight desktop:

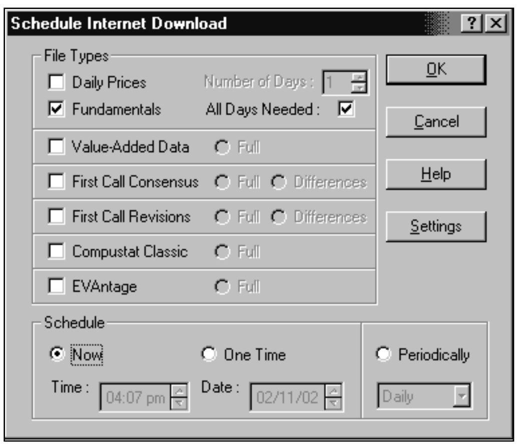
1. From the **Tools** menu, select **Task Scheduler**.
   In the Task Scheduler dialog box, Click the **New Task** button.



2. You will see the New Schedule Entry dialog box.
   Select the **Internet Download** radio button and click **OK**.



You will see the Schedule Internet Download dialog box.



3. Select the file or files you want to download from the File Types area.
4. Select when you want the file downloaded using the radio buttons in the Schedule area
   Now — The file will be downloaded as soon as you close the Task Scheduler.
   One Time — Select the time and date in the fields at the bottom of the dialog box.
   Periodically — Select the time of day, start date and frequency (daily/weekly/monthly) in the fields at the bottom of the dialog box.

5. Click **OK**.
   You return to the Task Scheduler dialog box. The download you just scheduled appears in alphabetical order in the list of Scheduled Tasks.
6. When you are finished scheduling downloads, close the Task Scheduler dialog box.

Note on downloading multiple files: Research Insight downloads fundamental data first, market data second and FIRST CALL data third. Otherwise, files are downloaded in order according to the time scheduled.

Important: In order to download data, Research Insight must be open.

Additional Data Available

In addition to current core database information, the following additional data is available using the Research Insight Task Scheduler.

Daily Market Data in COMPUSTAT (North America)

To download up to 10 days of stock prices and other daily market data from the internet, select the Daily Prices file type in the Research Insight Task Scheduler. Daily market data requires a separate subscription. For more information please contact your account representative.

COMPUSTAT (North America) Item Name	Mnemonic
Adjustment Factor - Current Date	AFDTE
Adjustment Factor - Current Date Daily	AFDTED
Common Shares Traded - Current	CSHCUR
Common Shares Traded Daily	CSHTRD
Dividend Distribution Type - Ex-Date Daily	DVDIXD
Dividend Distribution Type - Pay-Date Daily	DVDIPD
Dividend Payment Method - Ex-Date Daily	DVMEXD
Dividend Payment Method - Pay-Date Daily	DVMEPD
Dividends Per Share - Ex-Date Daily	DVPSXD
Dividends Per Share - Pay-Date Daily	DVPSPD
Price - Close Daily	PRCCD
Price - Current	PRCCUR
Price - High Daily	PRCHD
Price - Low Daily	PRCLD
Price Status Code Daily	PRCSTD
Total Return Factor - Online	TRFD1

Note: All related Adjustment Factors are automatically downloaded with each Item Group.

Daily Market and Currency Data in COMPUSTAT (Global)

Daily market and currency data for non-North American companies is available in COMPUSTAT (Global) through the Fundamentals Internet download in the Research Insight Task Scheduler. Daily market and currency data requires a separate subscription. For more information please contact your account representative.

Values for daily market and currency data are month-to-date, obtained by rolling the current period forward. For example, yesterday's close price will appear in the monthly slot for the new current month and will be overwritten daily with each new close price downloaded. Where there is no close price for the prior day, the last reported close price will be carried forward to become the month-to-date value.

Monthly Market Items	Mnemonic
Iss Adj Fac – Monthly – Ex – Gen	AJXMI1
Iss Adj Fac – Monthly –Ex –Shr	AJXMI2
Price-High Mnthly	PRCHM
Price-Close Mnthly	PRCCM
Price-Low Mnthly	PRCLM
Com Shares Traded – Mnthly	CSHTRM
Div per Share-Paydate – Mnthly	DVPSPM
Div per Share-Exdate – Mnthly	DVPSXM
ISO Code-Monthly – Market – Iss	ISOMMI

Annual Market Items	Mnemonic
Issue Adj Fac-Annual-Ex-Gen	AJXI1
Issue Adj Fac-Annual-Ex-Sh	AJXI2
Com Shares Outstanding	CSHO
Com Shares-Basic EPS (AR)	CSHPRIA
EPS Basic Exc Extra Itm (AR)	EPSPXA

Scalar Market Items	Mnemonic
Internet Download Dt-Annual	UPDDTA
Internet Download Dt-Monthly	UPDDTM
Internet Download Dt-Daily	UPDDTD
Current Period Daily	CPDD
Current Period Monthly	CPDM
Current Period Annual	CPD
Issue Adj Fac-Scalar-Ex-Gen	AJXSI1
Issue Adj Fac-Scalar-Ex-Shr	AJXSI2

Scalar Market Items (continued)	Mnemonic
Com Shares Outstanding IS	CSHOIS
Com Shares Outstanding PS	CSHOPS
EPS Basic ExcExtra Itm(AR)IS	EPSPXAIS
EPS Basic ExcExtra Itm(AR)PS	EPSPXAPS
Exchange Listing-Issue	EXCHGI
Inactive Issue Date	INISSD
Inactive Issue Marker	INISS
ISO Code-Fin'l-Issue	ISOFI
Issue Local Mkt Index Ind-1	LMIIS1
Issue Local Mkt Index Ind-2	LMIIS2
Quoteblock	QUOTEBLK

Currency Translation Rates for Month End/Monthly Average/12 Months Moving Average are downloaded for the following currencies:

Currency	Month End	Monthly Average	12 MM Average
Australian Dollars	XAUDME	XAUDAV	XAUD12
Belgian Francs	XBEFME	XBEFAV	XBEF12
British Pounds	XGBPME	XGBPAV	XGBP12
Canadian Dollars	XCADME	XCADAV	XCAD12
EMU Euro	XEURME	XEURAV	XEUR12
French Francs	XFRFME	XFRFAV	XFRF12
German Marks	XDEMME	XDEMAV	XDEM12
Hong Kong Dollars	XHKDME	XHKDAV	XHKD12
Italian Lira	XITLME	XITLAV	XITL12
Japanese Yen	XJPYME	XJPYAV	XJPY12
Netherlands Guilders	XNLGME	XNLGAV	XNLG12
S. African Rands	XZARME	XZARAV	XZAR12
Spanish Pesetas	XESPME	XESPAV	XESP12
Swedish Kroner	XSEKME	XSEKAV	XSEK12
Swiss Francs	XCHFME	XCHFAV	XCHF12
US Dollars	XUSDME	XUSDAV	XUSD12

Notes:

To enable the currency information download in Research Insight, on the Tools/Options/Currency Translations tab, select the "Use Current Translation Rate" radio button. The daily market data download is supported only for the latest two core database downloads. Market data is adjusted for stock splits. If no pricing information can be obtained during the current month, then the prior month’s pricing information will be carried forward.

Daily Fundamental Data

You can download up to 10 days of the most recent COMPUSTAT (North America) and up to 55* days of the most recent Global Income Statement and Balance Sheet data items. Daily fundamental data requires a separate subscription. For more information please contact your account representative. The fundamental data items available on a daily basis are listed below:

Item Name	Mnemonic	North America Data	Global Data
Acceptances Outstanding	ACCO	X	
Accounts Payable	AP	X	X
Accounts Payable Qtly	APQ	X	
Accounts Payable and Accrued Liab - Increase (Decrease)	APALCH	X	
Accounts Payable and Accrued Liab - Increase (Decrease) Qtly	APALCQ	X	
Accts Rec/Debtors - Total	RECT		X
Accts Rec/Debtors - Total-FS	ARTFS		X
Acquisitions - S&U	AQC	X	
Acquisitions - S&U Qtly	AQCQ	X	
AdjFactor - Cum Exdate	AJEX	X	
AdjFactor - Cum Ex Qtly	AJEXQ	X	
AdjFactor - Cum Ex Monthly	AJEXM	X	
Admin & General Expenses - Total	XAGT		X
Amort - Def Policy Acq Costs	ADPAC		X
Appropriations to Untaxed Resvs	AUTXR		X
Assets & Liab - Other Net Chg	AOLOCH	X	
Assets & Liab - Oth Net Chg Qtly	AOLOCQ	X	
Assets - Other	AO	X	X
Assets - Total	AT	X	X
Assets - Total - Interim	ATIS		X
Assets - Total - Preliminary	ATPS		X
Assets-Total Qtly	ATQ	X	
Benefits & Claims - Total	BCT		X
Brok, Clearing & Exchg Fees	BCEF		X
Capital Expenditures	CAPX	X	
Capital Exp (FOF)- Interim	CAPXIS		X
Capital Exp (FOF)- Preliminary	CAPXPS		X
Capital Expenditures Qtly	CAPXQ	X	
Capital Surplus	CAPS		X
Capitalized Costs	CAPCST		X
Cash & Deposits - Segregated	CHS		X
Cash & Due From Banks	CH		X

Item Name	Mnemonic	North America Data	Global Data
Cash & Equivalents	CHE	X	
Cash & Equivalents Qtly	CHEQ	X	
Cash & Equivalents - Incr(Decr) (FOF) - Interim	CHECHIS		X
Cash & Equivalents - Incr (Decr) (FOF) - Preliminary	CHECHPS		X
Cash & Equivalents - Incr(Decr) (Jpn Non) - Interim	CHECHJIS		X
Cash & Equivalents - Incr(Decr) (Jpn Non) - Preliminary	CHECHJPS		X
Cash & ST Investments	CHSTI		X
Cash Dividends	DV	X	
Cash Dividends Qtly	DVQ	X	
Cash Dividends - Preferred	DVP	X	
Cash Dividends - Preferred Qtly	DVPQ	X	
Change in Cash and Equivalents	CHECH	X	
Change in Current Debt	DLCCH	X	
Change in Current Debt Qtly	DLCCHQ	X	
Change in Short-Term Investments	IVSTCH	X	
Change in Short-Term Inv - Qtly	IVSTCQ	X	
Change In Stocks	STKCH		X
Commissions & Fees-Brok/Deal	CFBD		X
Commissions & Fees-Real Est	CFERE		X
Commissions & Fees-Other	CFO		X
Commissions & Fees Paid-Oth	CFPDO		X
Common Shares for Basic EPS	CSHPRI	X	
Common Shares for Basic EPS Qtly	CSHPRQ	X	
Common Shares for Diluted EPS	CSHFD	X	
Common Shares for Dil EPS - Qtly	CSHFDQ	X	
Com Shares Outstanding	CSHO	X	
Com Shares Outstanding - Interim	CSHOIS		X
Com Shares Outstanding - Prelim	CSHOPS		X
Com Shares Outstanding Qtly	CSHOQ	X	
Common Equity - Total (Common/Ordinary Equity)	CEQ	X	X
Common Equity-Total-Qtly	CEQQ	X	
Common Stock	CSTK	X	
Communications Expense	XCOM	X	
Communications Expense - In	XCOMI	X	
Company Name	CONM	X	
Company Website Address	WEBURL	X	
Cost of Goods Sold	COGS	X	X

Item Name	Mnemonic	North America Data	Global Data
Cost of Goods Sold Qtly	COGSQ	X	
CUSIP Number	CUSIP	X	
Cumulative Translation Adj	TRANSA		X
Current Assets - Other	ACO	X	X
Current Assets - Other Qtly	ACOQ	X	
Current Assets - Total	ACT	X	X
Current Assets - Total - Interim	ACTIS		X
Current Assets - Total - Preliminary	ACTPS		X
Current Assets - Total Qtly	ACTQ	X	
Current Liabilities - Other	LCO	X	X
Current Liabilities - Other Qtly	LCOQ	X	
Current Liabilities - Total	LCT	X	X
Current Liabilities - Total - Interim	LCTIS	X	
Current Liabilities - Total - Prelim	LCTPS	X	
Current Liabilities - Total Qtly	LCTQ	X	
Current Period	CPD	X	X
Current Period Qtly	CPDQ	X	
Customers' Acceptances	CA	X	
Debt in Current Liabilities	DLC	X	X
Debt in Current Liab - Interim	DLCIS		X
Debt in Current Liab - Preliminary	DLCPS		X
Debt in Current Liabilities Qtly	DLCQ	X	
Deferred Policy Acq Costs	DFPAC		X
Deferred Taxes - Balance Sheet	TXDB		X
Deferred Taxes - S&U	TXDC	X	
Deferred Taxes - S&U Qtly	TXDCQ	X	
Deferred Taxes & ITC	TXDITC	X	
Deferred Taxes & ITC Qtly	TXDITQ	X	
Deposits - Demand - Customers	DPDC		X
Deposits - Long-Term Time	DPLTB		X
Deposits - Short-Term Demand	DPSTB		X
Deposits - Time - Customers	DPTIC		X
Deposits - Total - Banks	DPTB		X
Deposits - Total - Customers	DPTC		X
Depreciation Of Fixed Assets	DFXA		X
Depreciation Qtly	DPQ	X	
Depreciation - S&U	DPC	X	
Depreciation - S&U Qtly	DPCQ	X	
Depreciation and Amortization	DP	X	X
Depreciation and Amort - Interim	DPIS		X
Depreciation and Amort - Prelim	DPPS		X
Development Revenue - Real Est	DVRRE		X

Item Name	Mnemonic	North America Data	Global Data
Dilution Adjustment	DILADJ	X	
Dilution Adjustment - Qtly	DILADQ	X	
Dilution Available - Excluding	DILAVX	X	
Dilution Available - Excl - Qtly	DILAVQ	X	
Div & Bonus Pd Policyhldrs	DVPDP		X
Div per Share-Exdate Qtly	DVPSXQ	X	
Dividends - Preferred/Preference	DVP		X
Dividends - Share Capital - Other	DVSCO		X
Dividends - Total	DVT		X
Dividends - Total - Interim	DVTIS		X
Dividends - Total - Preliminary	DVTPS		X
EPS Basic from Operations	OPEPS	X	
EPS Basic from Operations-12MM	OEPS12	X	
EPS Basic from OperatIons-Qtly	OPEPSQ	X	
EPS Basic Excl Extra Items	EPSPX	X	
EPS Basic Excl Extra Items 12MM	EPSX12	X	
EPS Basic Excl Extra Items Qtly	EPSPXQ	X	
EPS Basic Excl Extra Items (As Reptd) - Interim	EPSPXAIS		X
EPS Basic Excl Extra Items (As Reptd) - Preliminary	EPSPXAPS		X
EPS Basic Incl Extra Items	EPSPI	X	
EPS Basic Incl Extra Items Qtly	EPSPIQ	X	
EPS Diluted from Operations	OPEPSX	X	
EPS Dil from Oper - 12MM	OEPF12	X	
EPS Dil from Oper - 12MM - Qtly	OEPSXQ	X	
EPS Dil Excl Extra - 12MM	EPSF12	X	
EPS Diluted Excl Extra Items	EPSFX	X	
EPS Diluted Excl Extra Items Qtly	EPSFXQ	X	
EPS Diluted Incl Extra Items	EPSFI	X	
EPS Diluted Incl Extra Items Qtly	EPSFIQ	X	
Employees	EMP	X	X
Equity in Net Loss (Earnings)	ESUBC	X	
Equity in Net Loss (Earnings) Qtly	ESUBCQ	X	
Equity Reserves - Total	RVEQT	X	
Exchange Rate Effect	EXRE	X	
Exchange Rate Effect Qtly	EXREQ	X	
Expense-Development-Real Est	XDVRE		X
Expense-Investment-Real Est	XIVRE		X
Expense - Nonint - Bank (Total)	XNITB		X
Expense - Other - Broker/Dealer	XOBD		X

Item Name	Mnemonic	North America Data	Global Data
Expense - Other - Ins	XOI		X
Expense - Other - Real Estate	XORE		X
Expense - Sundry	XS		X
Expense - Total	XT		X
Extraordinary Items	XI		X
Extraordinary Items - Interim	XIIS		X
Extraordinary Items - Preliminary	XIPS		X
Extraordinary Items & Disc Oper	XIDO	X	
Extra Items & Disc Oper Qtly	XIDOQ	X	
Extra Items & Disc Oper - S&U	XIDOC	X	
ExtraItems & DiscOper- S&U Qtly	XIDOCQ	X	
File Code	FCD		X
Financing Activities - Other	FIAO	X	
Financing Activities - Other Qtly	FIAOQ	X	
Financing Act - Net Cash Flow	FINCF	X	
Financing Act - Net Cash Flow Qtly	FINCFQ	X	
Fiscal Year	FYR	X	
Fiscal Year - Interim	FYRIS		X
Fiscal Year - Preliminary	FYRPS		X
Fiscal Year-End Month of Data	FYR		X
Fiscal Year Qtly	FYRQ	X	
Fixed Assets (Tangible) - Tot(Gross)	PPEGT		X
Foreign Currency Adjustment	FCA		X
Foreign Exchange Assets	FEA		X
Foreign Exchange Liabilities	FEL		X
Funds from Operations - Other	FOPO	X	
Funds from Operations - Other Q	FOPOQ	X	
GLOBAL Vantage Key - Interim	GVKEYIS		X
GLOBAL Vantage Key - Prelim	GVKEYPS		X
Goodwill	GDWL		X
Income & Net Income Note	NIF	X	
Income Bef Extra Items	IB	X	X
Income Bef Extra Items - Interim	IBIS		X
Income Bef Extra Items - Prelim	IBPS		X
Income Bef Extra Items Qtly	IBQ	X	
Income Bef Extra Items Qtly Note	IBQF	X	
Income Bef Extra Items - S&U	IBC	X	
Income Bef Extra Items - S&U Qtly	IBCQ	X	
Inc Bef Extra Items - Adj for CSE	IBADJ	X	
Income Bef Extra Items - Adj Qtly	IBADJQ	X	
Income - Nonint - Bank (Total)	INITB		X
Income - Other - Brok/Deal	IOBD		X

Item Name	Mnemonic	North America Data	Global Data
Income - Other - Ins	IOI		X
Income - Other - Real Est	IORE		X
Income Statement Model Number	ISMOD		X
Income Taxes - Accrued - Incr(Decr)	TXACH	X	
Inc Taxes - Accr - Incr(Decr) Qtly	TXACHQ	X	
Income Taxes - Paid	TXPD	X	
Income Taxes - Paid Qtly	TXPDQ	X	
Income Taxes - Payable	TXP	X	
Income Taxes - Payable Qtly	TXPQ	X	
Income Taxes - Total	TXT	X	X
Income Taxes - Total Qtly	TXTQ		X
Increase in Investments	IVCH	X	
Increase in Investments	IVCHQ	X	
Industry Code - Current	SIC		X
Industry Presentation Code	IPCD		X
Insurance Prem - Total - Ins	IPTI	X	
Intangibles	INTAN	X	X
Interest & Div Inc - Total	IDIT		X
Interest & Related Income - Ins	IRII		X
Interest Capitalized	INTC		X
Interest Expense - Total	XINT	X	X
Interest Expense - Total - Interim	XINTIS		X
Interest Expense - Total - Prelim	XINTPS		X
Interest Expense Qtly	XINTQ	X	
Interest Income - Net	NIINT		X
Interest Paid - Net	INTPN	X	
Interest Paid - Net of Cap Interest	INTPNQ	X	
Internet Download Date - Annual	UPDDTA	X	X
Internet Download Date - Qtly	UPDDTQ	X	
Internet Download Date - Scalar	UPDDTS	X	X
Inven/Stocks - Total	INVT	X	
Inventory - Decrease (Incr)	INVCH	X	
Inventory - Decrease (Incr) Qtly	INVCHQ	X	
Inventories - Total	INVT	X	
Inventories - Total Qtly	INVTQ	X	
Invested Capital	ICAPT		X
Investing Activities - Net Cash Flow	IVNCF	X	
Investing Act - Net Cash Flow Qtly	IVNCFQ	X	
Investing Activities - Other	IVACO	X	
Investing Activities - Other Qtly	IVACOQ	X	
Investments & Advances - Equity	IVAEQ	X	X
Investments & Advances - Other	IVAO	X	

Item Name	Mnemonic	North America Data	Global Data
Invest Asts - Total - Ins	IATI		X
Investment Banking Income	IBKI		X
Investment Expense - Ins	XIVI		X
Investment Income - Real Est	IIRE		X
Investments Income - Total - Ins	IVI		X
Investments & Advances - Other	IVAO		X
Investments - Permanent - Total	IVPT		X
Investment Property	IP		X
Invest Sec - Gain (Loss) - Total	ISGT		X
Invest Sec - Total	IST		X
ISO Code - Financial	ISOF		X
ISO Code - Financial - Interim	ISOFIS		X
ISO Code - Financial - Preliminary	ISOFPS		X
Issuance of Long-Term Debt	DLTIS	X	
Issuance of Long-Term Debt Qtly	DLTISQ	X	
Level of Consolidation	CONSOL		X
Level of Consolidation - Interim	CONSOLIS		X
Level of Consolidation - Prelim	CONSOLPS		X
Liabilities - Other	LO	X	X
Liabilities - Other Qtly	LOQ	X	
Liabilities & Share Equity	LSE		X
Liabilities - Total	LT	X	X
Liabilities - Total - Interim	LTIS		X
Liabilities - Total - Preliminary	LTPS		X
Liabilities - Total Qtly	LTQ	X	
Loans/Claims/Adv-Banks & Govt	LCABG		X
Loans/Claims/Advances - Comml	LCAL		X
Loans/Claims/Adv-Customers	LCACU		X
Loans/Claims/Advances - Other	LCAO		X
Loans For Margin Transaction	MTL		X
LT Debt - Total	DLTT	X	X
LT Debt - Total - Interim	DLTTIS		X
LT Debt - Total - Preliminary	DLTTPS		X
LT Debt - Total Qtly	DLTTQ	X	
Minority Interest (BS)	MIB	X	X
Minority Interest (BS) Qtly	MIBQ	X	
Minority Interest (Inc Acc)	MII	X	X
Minority Interest (Inc Acc) Qtly	MIIQ	X	
NAICS Code	NAICS	X	
Net Income Adj for CSE	NIADJ	X	
Net Income (Loss)	NI	X	
Net Income (Loss) Qtly	NIQ	X	

Item Name	Mnemonic	North America Data	Global Data
Net Items - Total	NIT		X
Nonoperating Inc (Exp) - Other	NOPIO		X
Nonoperating Inc (Exp) - Total	NOPI	X	X
Nonoperating Inc (Exp) Qtly	NOPIQ	X	
Operating Act - Net Cash Flow	OANCF	X	
Operating Act - Net Cash Flow Qtly	OANCFQ	X	
Operating Expense	XOPR		X
Operating Expense - Other	XOPRO		X
Operating Income	OPINC		X
Op Income Aft Depreciation	OIADP	X	
Op Income Bef Depreciation	OIBDP	X	
Op Income Bef Depreciation Qtly	OIBDPQ	X	
Operating Revenues - Other	OPRO		X
Participation Fights Certifs	PRC		X
Period Duration - Months	PDM		X
Period Duration - Months - Interim	PDMIS		X
Period Duration - Months - Prelim	PDMPS		X
Preferred Stock	PSTK	X	X
Preferred Stock Qtly	PSTKQ	X	
Pretax Income	PI	X	X
Pretax Income - Interim	PIIS		X
Pretax Income - Preliminary	PIPS		X
Pretax Income Qtly	PIQ	X	
Primary GICS Code - Current	SPGICX	X	
Primary SIC Code	SIC	X	
Principal Transactions	PTRAN		X
PP&E - Total Net	PPENT	X	X
PP&E - Total Net Qtly	PPENTQ	X	
Provision for Credit Losses	PCL		X
Provision - Other - Net	PVON		X
Provision - Total	PVT		X
Purchase of Common and Pfd Stock	PRSTKC	X	
Purchase of Com and Pfd Stock Qtly	PRSTKQ	X	
Raw Materials, Supplies, Merch	RAWMSM		X
Receivables - Decr (Incr)	RECCH	X	
Receivables - Decr (Incr) - Qtly	RECCHQ	X	
Receivables - Total	RECT	X	
Receivables - Total Qtly	RECTQ	X	
Reduction of Long-Term Debt	DLTR	X	
Reduction of Long-Term Debt Qtly	DLTRQ	X	
Reinsur Assets - Total - Ins	RATI		X
Reinsurance Liab - Total	RLT		X

Item Name	Mnemonic	North America Data	Global Data
Reported Date of Qtly EPS	RDQ	X	
Research & Development	XRD	X	
Research & Development - Qtly	XRDQ	X	
Reserves - Total - Ins	RVTI		X
Reserves - Untaxes	RVUTX		X
Revenue/Income - Sundry	RIS		X
Revenue - Total	REVT		X
Revenue - Total - Interim	REVTIS		X
Revenue - Total - Preliminary	REVTPS		X
S&P Index Code - Current	SPMIX	X	
S&P Industry Code - Current	SPIIX	X	
Sale of Common/Preferred Stock	SSTK	X	
Sale of Common/Preferred Stock Qtly	SSTKQ	X	
Sale of Investments	SIV	X	
Sale of Investments (Qtly)	SIVQ	X	
Sale of Property, Plant and Equipment	SPPE	X	
Sale of Property, Plant and Equip Qtly	SPPEQ	X	
Sale of Property, Plant and Equip & Investments - Loss (Gain)	SPPIV	X	
Sale of Property, Plant and Equip & Investments - Loss (Gain) - Qtly	SPPIVQ	X	
Sales-Net	SALE	X	
Sales - Net Note	SALEF	X	
Sales-Net Qtly	SALEQ	X	
Sales-Net Qtly Note	SALEQF	X	
Sales/Turnover (Net)	SALE		X
S&P Domestic Long-Term Issuer Credit Rating - Current	SPDRC	X	
Sec Borr's & Depos'd by Cust	SBDC		X
Securities In Custody	SC		X
SG&A Expense	XSGA	X	X
SG&A Expense Qtly	XSGAQ	X	
Securities Sold Not Purchased	SSNP		X
Separate Account Assets	SAA		X
Separate Account Liabilities	SAL		X
Share Capital - Other	SCO		X
Shareholders' Equity - Total	SEQ		X
Short-Term Investments - Other	STIO		X
ST Investments - Total	IVST		X
Source Code	SRC	X	X
Source Code - Interim	SRCIS		X

Item Name	Mnemonic	North America Data	Global Data
Source Code - Preliminary	SRCPS		X
Source Code Qtly	SRCQ	X	
Special Items	SPI	X	X
Special Items Qtly	SPIQ	X	
Stockholders' Equity	SEQ	X	
Stockholders' Equity Qtly	SEQQ	X	
Staff Expense - Total	XSTF		X
Ticker Symbol	TIC	X	
Trd/Deal Sec - Gain (Loss)	TDSG		X
Trd/Deal Acct Sec - Total	TDST		X
Treasury Stock - Total	TSTK		X
Update Code	UPD	X	X
Update Code - Interim	UPDIS		X
Update Code - Preliminary	UPDPS		X
Update Code Quarterly	UPDQ	X	
Working Capital/Cash/Net Funds Change - Total - Interim	WCAPTIS		X
Working Capital/Cash/Net Funds Change - Total - Preliminary	WCAPTPS		X

* These items can be downloaded daily, but are updated with the weekly core database.
* Although up to 55 days of daily fundamental data for Global subscribers can be downloaded, fundamental data older than the previous month-end date would be incorporated into the Research Insight (Global) database.

Earnings Estimates Data

FIRST CALL and I/B/E/S (Institutional Brokers Estimate System), our two powerful estimates databases, deliver top analysts' earnings expectations and related financial data, fully integrated with Standard & Poor’s Research Insight for easy comparisons of recent and expected performance. An additional subscription is required to access FIRST CALL and I/B/E/S data.

FIRST CALL Data

The FIRST CALL database, provided by FIRST CALL Quantitative Services, contains daily consensus earnings estimates, analysts' recommendations, and related investment information from more than 170 contributing firms.

Estimates are provided for two quarters and two fiscal years of consensus earnings estimate data, expected report dates, consensus recommendations, future growth rates, earnings surprise data, operating actual earnings and P/E ratios. The FIRST CALL database also contains earnings estimate consensus trends and estimate revision momentum data to help you compare recent performance to expected performance.

FIRST CALL subscribers can download daily FIRST CALL data from the Internet through the Task Scheduler. Updated data is available after 2:00 a.m. MST.

This database is available with a separate subscription agreement.

I/B/E/S Data

The Institutional Brokers Estimate System (I/B/E/S) is a database of earnings expectations obtained from more than 2,500 security analysts on over 5,000 companies. Earnings forecast information is received continuously from contributing research departments worldwide. I/B/E/S data researchers review the data and subject it to rigorous validity controls before it is allowed to be entered into the database.

Current estimates (most recent available) are updated weekly. Monthly estimates are updated the third week of the month. The data is available on Research Insight as of the subsequent month-end production. Estimates from each of the previous six months are presented for current year, next year, current quarter and next quarter.

I/B/ES data is integrated within the Research Insight core database.

This database is available with a separate subscription agreement.

Value-Added Data Download

The Value-Added Data Download offers current data updates of daily and index fundamentals, Insider, and Instituional, Economic, Sector and a variety of additional items to all Research Insight clients through an Internet download.

Economic Data

U.S. and Canadian economic data provides you with critical economic indicators and macroeconomic statistics. All economic concepts are presented as monthly figures for up to 20 years. These concepts or their components are provided by *DRI WEFA*. As the respective government agencies revise historical statistics, we also update Research Insight to reflect those changes.

Economic data is updated on a weekly basis.

The economic data items in Research Insight are:

U.S. Economic Data

Mnemonic	Item
CAPAPM	Capital Asset Pricing Model
CPI	Consumer Price Index - All Urban - All Items
EMPLOY	Employment - Nonfarm
FEDFUNDS	Federal Funds Rate
BOND20YR	Government Bonds - 20 Year
BOND30YR	Government Bonds - 30 Year
NOTE2YR	Government Notes - 2 Year
NOTE3YR	Government Notes - 3 Year
NOTE5YR	Government Notes - 5 Year
NOTE7YR	Government Notes - 7 Year
NOTE10YR	Government Notes - 10 Year
GDP	Gross Domestic Product
HOUSE	Housing Starts
INFLATN	Inflation Rate
LIBOR1M	LIBOR 1 Month
LIBOR2M	LIBOR 2 Month
MKTIND	Market Indicator
M1	Money Supply (M1)
M2	Money Supply (M2)
PRIME	Prime Interest Rate
PPI	Producer Price Index - Finished Goods - All Items
RTLSALES	Retail Sales - Total

AUTO	Sale of Passenger Cars
TBILL1M	Treasury Bill - 1 Month
TBILL2M	Treasury Bill - 2 Month
TBILL3M	Treasury Bill - 3 Month
TBILL6M	Treasury Bill - 6 Month
TBILL12M	Treasury Bill - 12 Month
UNEMP	Unemployment Rate

Canadian Economic Data

Mnemonic	Item
CAUTO	Sale of Passenger Cars - Canada
CBOND10YR	Government Bonds 10 Year and Over - Canada
CBOND30YR	Government Bonds - 30 Year - Canada
CCPI	Consumer Price Index - All Items - Canada
CEMPLOY	Employment - Canada
CGDP	Gross Domestic Product - Canada
CHOUSE	Housing Starts (Units) - Canada
CNOTE10YR	Government Notes - 10 Year - Canada
CNOTE5YR	Government Notes - 5 Year - Canada
CIPPI	Industrial Product Price Index - Canada
CPRIME	Prime Interest Rate - Canada
CRAWMAT	Raw Material Price Index - Canada
CRTLSALES	Retail Sales - Total - Canada
CTBILL12M	Treasury Bill - 12 Month - Canada
CTBILL3M	Treasury Bill - 3 Month - Canada
CUNEMP	Unemployment Rate - Canada

Historical NAICS

NAICS is a 6-digit coding system for classifying establishments on a production/process-oriented basis.

Following is an example of the NAICS code hierarchy:

Sector	51	Information
Subsector	513	Broadcasting & Telecommunications
Industry Group	5133	Telecommunications
NAICS Industry	51332	Wireless Telecomm. Carriers except Satellite
National	513321	Paging

Historical NAICS is included in your basic Research Insight subscription.
See the Reference section of Research Insight on-line help for a complete list of NAICS codes.

Index Fundamentals

Index Fundamentals integrates S&P Index data with Research Insight, allowing you to create benchmarks to compare to your target companies and to search out industries that are high performers. Data includes fundamental financial data (i.e. Sales, Cost of Goods Sold, etc.), per share data and ratios for the S&P Indexes. Values are pre-calculated by taking an item for each of the companies in an S&P Major Index or S&P Industry Index, summing that value and dividing this number by S&P's base Divisor.

The index fundamental data items are listed below, along with the type of calculation:

Balance Sheet

Data Item	Mnemonic	Type of Calculation
Accounts Payable - Annual	AP	Non-Share Item
Accounts Payable - Quarterly	APQ	Non-Share Item
Accrued Expense - Annual	XACC	Non-Share Item
Adjustment Factor - Annual	AJEX	Per-Share Item *
Adjustment Factor - Quarterly	AJEXQ	Per-Share Item *
Capital Surplus - Annual	CAPS	Non-Share Item
Capital Surplus - Quarterly	CAPSQ	Non-Share Item
Cash Equivalents - Annual	CHE	Non-Share Item
Cash Equivalents - Quarterly	CHEQ	Non-Share Item
Common Equity - Annual	CEQ	Non-Share Item
Common Equity - Quarterly	CEQQ	Non-Share Item
Common Stock - Annual	CSTK	Non-Share Item
Common Stock - Quarterly	CSTKQ	Non-Share Item
Current Portion of LTD - Annual	DLC	Non-Share Item
Current Portion of LTD - Quarterly	DLCQ	Non-Share Item
Deferred Income Tax - Annual	TXDB	Non-Share Item
Deferred Income Tax & Investment Tax Credit - Quarterly	TXDITQ	Non-Share Item
Income Tax Payable - Annual	TXP	Non-Share Item
Income Tax Payable - Quarterly	TXPQ	Non-Share Item
Income Tax Refund - Annual	TXR	Non-Share Item
Intangibles - Annual	INTAN	Non-Share Item
Inventories - Annual	INVT	Non-Share Item
Inventories - Quarterly	INVTQ	Non-Share Item
Invested Capital - Annual	ICAPT	Non-Share Item
Invested Capital - Quarterly	ICAPTQ	Non-Share Item
Investment Tax Credit - Annual	ITCB	Non-Share Item
Investments & Advancements to Uncons. Subs. - Annual	IVAEQ	Non-Share Item

Data Item	Mnemonic	Type of Calculation
Less Treasury Stock - Annual	TSTK	Non-Share Item
Less Treasury Stock - Quarterly	TSTKQ	Non-Share Item
Long Term Debt - Annual	DLTT	Non-Share Item
Long Term Debt - Quarterly	DLTTQ	Non-Share Item
Minority Interest - Annual	MIB	Non-Share Item
Minority Interest - Quarterly	MIBQ	Non-Share Item
Net PP&E - Annual	PPENT	Non-Share Item
Net PP&E - Quarterly	PPENTQ	Non-Share Item
Notes Payable - Annual	NP	Non-Share Item
Other Assets - Annual	AO	Non-Share Item
Other Assets - Quarterly	AOQ	Non-Share Item
Other Current Assets - Annual	ACO	Non-Share Item
Other Current Assets - Quarterly	ACOQ	Non-Share Item
Other Current Liabilities - Annual	LCO	Non-Share Item
Other Current Liabilities - Quarterly	LCOQ	Non-Share Item
Other Liabilities - Annual	LO	Non-Share Item
Other Liabilities - Quarterly	LOQ	Non-Share Item
Retained Earnings - Annual	RE	Non-Share Item
Retained Earnings - Quarterly	REQ	Non-Share Item
Shares Outstanding - Annual	CSHO	Per-Share Item *
Shares Outstanding - Quarterly	CSHOQ	Per-Share Item *
Stockholders Equity - Annual	SEQ	Non-Share Item
Stockholders Equity - Quarterly	SEQQ	Non-Share Item
Total Assets - Annual	AT	Non-Share Item
Total Assets - Quarterly	ATQ	Non-Share Item
Total Current Assets - Annual	ACT	Non-Share Item
Total Current Assets - Quarterly	ACTQ	Non-Share Item
Total Current Liabilities - Annual	LCT	Non-Share Item
Total Current Liabilities - Quarterly	LCTQ	Non-Share Item
Total Liabilities - Annual	LT	Non-Share Item
Total Liabilities - Quarterly	LTQ	Non-Share Item
Total Preferred Stock - Annual	PSTK	Non-Share Item
Total Preferred Stock - Quarterly	PSTKQ	Non-Share Item
Total Receivables - Annual	RECT	Non-Share Item
Total Receivables - Quarterly	RECTQ	Non-Share Item

* This value is set to 1.0000 for all records; all index items are on a per share basis. As a result, this item is being set to 1.0000 for per share concepts in Research Insight.

Income Statement

Data Item	Mnemonic	Type of Calculation
$ Savings-Common Stock Equivalents - Annual	CSTKE	Non-Share Item
$ Savings-Common Stock Equivalents - Quarterly	CSTKEQ	Non-Share Item
Cost of Goods Sold - Annual	COGS	Non-Share Item
Cost of Goods Sold - Quarterly	COGSQ	Non-Share Item
Depreciation - Annual	DP	Non-Share Item
Depreciation - Quarterly	DPQ	Non-Share Item
Earnings Per Share (Basic) Excluding Extra Items - Annual	EPSPX	Per-Share Item
Earnings Per Share (Basic) Excluding Extra Items-Quarterly	EPSPXQ	Per-Share Item
Earnings Per Share (Basic) from Operations - Annual	OPEPS	Per-Share Item
Earnings Per Share (Basic) from Operations - Quarterly	OPEPSQ	Per-Share Item
Earnings Per Share (Basic) Including Extra Items - Annual	EPSPI	Per-Share Item
Earnings Per Share (Basic) Including Extra Items -Quarterly	EPSPIQ	Per-Share Item
Income Available for Common - Annual	IBCOM	Non-Share Item
Income Available for Common - Quarterly	IBCOMQ	Non-Share Item
Income Before Extraordinary Items - Annual	IB	Non-Share Item
Income Before Extraordinary Items - Quarterly	IBQ	Non-Share Item
Income Before Extraordinary Items & Discontinued Operations - Adjusted for CSE - Annual	IBADJ	Non-Share Item
Income Before Extraordinary Items & Discontinued Operations - Adjusted for CSE - Quarterly	IBADJQ	Non-Share Item
Income Taxes - Annual	TXT	Non-Share Item
Income Taxes - Annual	TXT	Non-Share Item
Interest Expense - Annual	XINT	Non-Share Item
Interest Expense - Quarterly	XINTQ	Non-Share Item
Minority Interest - Annual	MII	Non-Share Item
Minority Interest - Quarterly	MIIQ	Non-Share Item
Net Income - Annual	NO	Non-Share Item
Net Income - Quarterly	NOQ	Non-Share Item
Nonoperating Expense - Annual	NOPI	Non-Share Item
Nonoperating Expense - Quarterly	NOPIQ	Non-Share Item

Data Item	Mnemonic	Type of Calculation
Operating Income Before Depreciation - Annual	OIBDT	Non-Share Item
Operating Income Before Depreciation - Quarterly	OIBDTQ	Non-Share Item
Operating Profit - Annual	OIADP	Non-Share Item
Operating Profit - Quarterly	OIADPQ	Non-Share Item
Preferred Dividends - Annual	DVP	Non-Share Item
Preferred Dividends - Quarterly	DVPQ	Non-Share Item
Pretax Income - Annual	PI	Non-Share Item
Pretax Income - Quarterly	PIQ	Non-Share Item
Sales - Annual	SALE	Non-Share Item
Sales - Quarterly	SALEQ	Non-Share Item
Selling, General, & Administrative Expense - Annual	XSGA	Non-Share Item
Selling, General, & Administrative Expense - Quarterly	XSGAQ	Non-Share Item
Special Items - Annual	SPI	Non-Share Item
Special Items - Quarterly	SPIQ	Non-Share Item

Cash Flow

Data Item	Mnemonic	Type of Calculation
Capital Expenditures - Annual	CAPX	Non-Share Item
Capital Expenditures - Quarterly	CAPXQ	Non-Share Item
Cash Dividends - Annual	DV	Non-Share Item
Cash Dividends - Quarterly	DVQ	Non-Share Item
Deprecation and Amortization - Annual	DPC	Non-Share Item
Deprecation and Amortization - Quarterly	DPCQ	Non-Share Item
Financing Activities - Net Cash Flow - Annual	FINCF	Non-Share Item
Financing Activities - Net Cash Flow - Quarterly	FINCFQ	Non-Share Item
Investing Activities - Net Cash Flow - Annual	IVNCF	Non-Share Item
Investing Activities - Net Cash Flow - Quarterly	IVNCFQ	Non-Share Item
Operating Activities - Net Cash Flow - Annual	OANCF	Non-Share Item
Operating Activities - Net Cash Flow - Quarterly	OANCFQ	Non-Share Item
Sale of Common and Preferred Stock - Annual	SSTK	Non-Share Item

Data Item	Mnemonic	Type of Calculation
Sale of Common and Preferred Stock - Quarterly	SSTKQ	Non-Share Item
Sale of Property, Plant, and Equipment - Annual	SPPE	Non-Share Item
Sale of Property, Plant, and Equipment - Quarterly	SPPEQ	Non-Share Item

Ratios

Data Item	Mnemonic	Type of Calculation
Average Collection Period - Annual	COLLECT	Weighted Average Ratio
Average Collection Period - Quarterly	COLLECTQ	Weighted Average Ratio
Current Ratio - Annual	CR	Weighted Average Ratio
Current Ratio - Quarterly	CRQ	Weighted Average Ratio
Days to Sell Inventory (Days) - Annual	SELLINV	Weighted Average Ratio
Days to Sell Inventory (Days) - Quarterly	SELLINVQ	Weighted Average Ratio
Debt to Total Assets (%) - Annual	DAT	Weighted Average Ratio
Debt to Total Assets (%) - Quarterly	DATQ	Weighted Average Ratio
Debt to Total Capital (%) - Annual	DTCAP	Weighted Average Ratio

Data Item	Mnemonic	Type of Calculation
Debt to Total Capital (%) - Quarterly	DTCAPQ	Weighted Average Ratio
Debt to Total Equity (%) - Annual	DETQ	Weighted Average Ratio
Debt to Total Equity (%) - Quarterly	DETQQ	Weighted Average Ratio
Dividend Payout - Annual	DVPOR	Weighted Average Ratio
Dividend Yield - Annual	DVYD	Weighted Average Ratio
Gross Operating Margin - Annual	GPM	Weighted Average Ratio
Gross Operating Margin - Quarterly	GPMQ	Weighted Average Ratio
Interest Coverage After Tax - Annual	ICBT	Weighted Average Ratio
Interest Coverage After Tax - Quarterly	ICBTQ	Weighted Average Ratio
Interest Coverage Before Tax - Annual	IC	Weighted Average Ratio
Interest Coverage Before Tax - Quarterly	ICQ	Weighted Average Ratio
Inventory Turnover - Annual	INVX	Weighted Average Ratio
Inventory Turnover - Quarterly	INVXQ	Weighted Average Ratio
Operating Cycle (Days) - Annual	OPCYCLE	Weighted Average Ratio
Operating Cycle (Days) - Quarterly	OPCYCLEQ	Weighted Average Ratio
Price to Book - Annual	MKBK	Weighted Average Ratio
Price to Earnings - Annual	PE	Weighted Average Ratio
Price to Earnings - Quarterly	PEQ	Weighted Average Ratio
Profit Margin (%) - Annual	NPM	Weighted Average Ratio
Profit Margin (%) - Quarterly	NPMQ	Weighted Average Ratio

Data Item	Mnemonic	Type of Calculation
Quick Ratio - Annual	QR	Weighted Average Ratio
Quick Ratio - Quarterly	QRQ	Weighted Average Ratio
Receivables Turnover- Annual	RECX	Weighted Average Ratio
Receivables Turnover- Quarterly	RECXQ	Weighted Average Ratio
Return on Average Assets - Annual	ROAA	Weighted Average Ratio
Return on Average Assets - Quarterly	ROAAQ	Weighted Average Ratio
Return on Average Equity - Annual	ROAE	Weighted Average Ratio
Return on Average Equity - Quarterly	ROAEQ	Weighted Average Ratio
Return on Average Investment - Annual	ROAI	Weighted Average Ratio
Return on Average Investment - Quarterly	ROAIQ	Weighted Average Ratio
Return on Equity - Annual	ROE	Weighted Average Ratio
Return on Equity - Quarterly	ROEQ	Weighted Average Ratio
Return on Investment - Annual	ROI	Weighted Average Ratio
Return on Investment - Quarterly	ROIQ	Weighted Average Ratio
Return on Total Assets (%) - Annual	ROA	Weighted Average Ratio
Return on Total Assets (%) - Quarterly	ROAQ	Weighted Average Ratio
Total Asset Turnover - Annual	ATT	Weighted Average Ratio
Total Asset Turnover - Quarterly	ATTQ	Weighted Average Ratio

Miscellaneous

Data Item	Mnemonic	Type of Calculation
S&P Index - Number of Companies Annually	SPNOA	N/A
S&P Index - Number of Companies Quarterly	SPNOQ	N/A
S&P Index - % of Equity Updated Annually	SPEQA	Weighted Average Ratio
S&P Index - % of Equity UpdatedQuarterly	SPEQQ	Weighted Average Ratio

Insider Trading

Insider Trading data includes

- Top Ten Buys, Top Ten Sells
- Aggregate data
- Open market transactions of 100 or more shares
- Rolling 12 months of data history; updated monthly
- Issue-level data
- Available through Internet daily download

Institutional Ownership

Institutional data includes

- Top Ten Buys, Top Ten Sells, Top Ten Changes and Top Ten Holders
- Aggregate data
- 4 quarters of data stored as monthly items; updated weekly
- Issue-level data
- Available through Internet daily download

IPO Date

This item is the date of a company's initial public stock offering. This item is useful in historical price analyses and in screening a population.

Sector Data

Sector data enables you to benchmark company performance against broad economic and industry sectors. Economic Sector Codes categorize every active and inactive company in the database into one of nine broad economic groups. The Industry Sector Codes further refine each classification into a more specific industry group.

When you download sector data, the following data items in Research Insight are updated:

Mnemonic	Item
ECNSEC	Current Economic Sector
ECNSECH	Historical Economic Sector
SECTOR	Current Industry Sector
SECTORH	Historical Industry Sector

Sector data can be downloaded from the Internet using the Task Scheduler.

Sector data is included in your basic Research Insight subscription. For a complete list Sector Codes and descriptions, refer to the Reference section of Research Insight on-line help.

Short Business Description

This is a brief textual description of a company's business operations. This item can be accessed through an Internet download of the Value Added database.

Value/Growth Indicator

This item compares a company's price-to-book ratio to the median price-to-book ratio for its industry sector.

Chapter 14
COMPUSTAT (Classic)

Overview

COMPUSTAT (Classic) is an as-reported historical database. By providing non-restated, quarterly COMPUSTAT data as it was originally collected by Standard & Poor's, COMPUSTAT (Classic) offers you the ability to filter out both the influences of restated data and backfilled data from company additions. This database allows you to look at as-reported data, as it was originally presented, at any point in time.

This chapter gives you detailed information about:

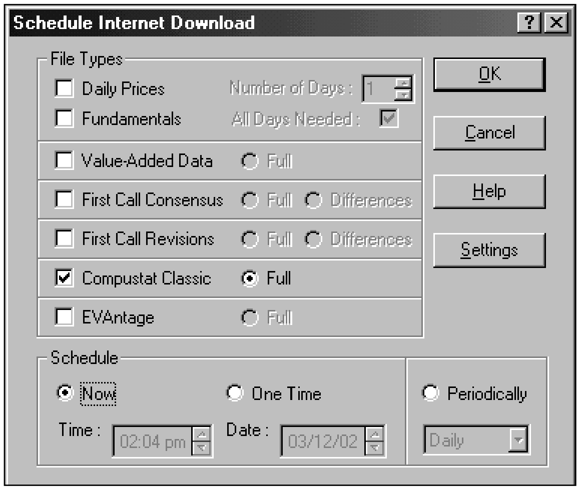
- Downloading Classic data from the Internet
- Viewing COMPUSTAT (Classic) data in Research Insight
- Working with Classic data in Research Insight

Downloading COMPUSTAT (Classic) Data from the Internet

You can schedule an automatic download of COMPUSTAT (Classic) data from the Internet using the Research Insight Task Scheduler. **Note:** You must download Classic data once a month to get the most current file.

To schedule a download, begin from the Research Insight desktop:

1. From the **Tools** menu, select **Task Scheduler** to display the Task Scheduler dialog box
2. Click the **New Task** button to display the New Schedule Entry dialog box.
3. Select the **Internet Download** radio button and click **OK**.
   The Schedule Internet Download dialog box appears.
4. Select **Compustat Classic** from the File Types area.

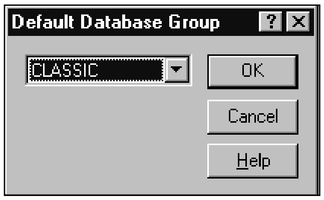


5. Select when you want the file downloaded using the radio buttons in the Schedule area
   Now - The file will be downloaded as soon as you close the Task Scheduler.
   One Ti me - Select the time and date in the fields at the bottom of the dialog box.
   Periodically - Select the time of day, start date and frequency (daily/weekly/monthly) in the fields at the bottom of the dialog box.
6. Click **OK**.
   You return to the Task Scheduler dialog box. The download you just scheduled appears in alphabetical order in the list of Scheduled Tasks.
7. When you are finished scheduling downloads, close the Task Scheduler dialog box.

Important: In order to download data, Research Insight must be running.

Working with Classic Data in Research Insight

If you want Research Insight to return Classic data values every time you use quarterly items in your screens, reports and charts, change the default database to Classic. From the **Databases** menu, select **Default Database**, then select **Classic** from the drop-down list.



When you select Classic as the default database, Research Insight searches for a data item value in the Classic database first. For example, both the Classic and the COMPUSTAT databases contain a value for Sales - Net Quarterly (SALEQ), but when Classic is selected as the active database, Research Insight will find the value for SALEQ in Classic, and the value for that item in the COMPUSTAT database will be blocked from view. See Chapter 10, Managing Your Databases, for further information on working with database layers and groups.

Use Functions to Target or Exclude Specific Database Layers

The **@DB function** allows you to return a formula from a specific layer of the active database group, even if you are working in another database, such as Classic. We recommend you use this function to target the COMPUSTATDB database layer, and include an absolute time period reference in the function.

Example:

Function:	@DB(database group layer,formula)
Function with argument:	@DB(compustatdb,sale[Y01])
What it does:	Returns the value for net sales from the COMPUSTAT database for 2001.

The **@EXCLUDEDB function** returns the formula from the first database layer where it is found, excluding the specified layer. Use this function when you're not sure in which database layer the data you want to retrieve is contained. We recommend you include a time reference and use this function to exclude either CS5USER, CLASSIC or CSPRICE from your search rather than excluding the COMPUSTATDB core database.

Example:

Function:	@EXCLUDEDB(database group layer,formula)
Function with argument:	@EXCLUDEDB(classic,gpmq[q2y01])
What it does:	Returns the quarterly gross profit margin for the second quarter of 2001 from the first database layer it is found in, excluding the Classic database