Datastream Advance for Office 4

Using Excel

Issue 1

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Using Excel with Advance for Office

Setting the Excel Add-In system options

System options are available for you to control the way you use the Excel Add-In and how data is presented. These options include:

❑ Request Format options

❑ Menu options

❑ Data options

To select these options:

1   Choose **Options** from the **Datastream-AFO** menu.
     The **Options** dialog is displayed.

2   Select the options you require by checking the boxes:
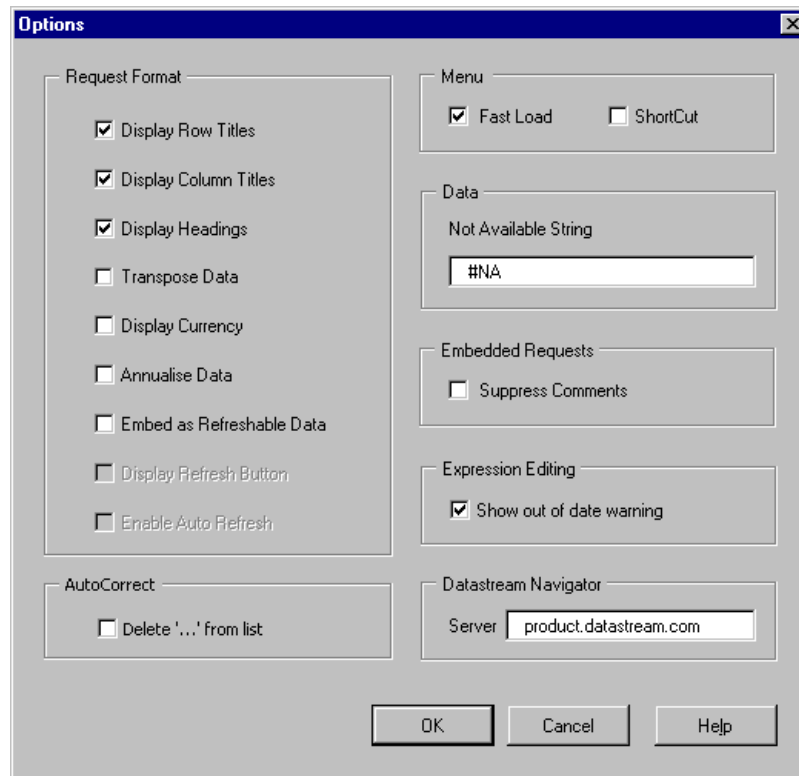
Request format options

These options define the default display options for data requests in Excel. They can be overridden by the request format options on the **Static Data Request**, **Time Series Request** and **Company Accounts Request** dialogs. Clicking the **Default Option** button on these dialogs returns the format options back to the default settings on the **Options** dialog.

Changes to the settings on the **Options** dialog will only take effect after Excel has been re-launched, or if the **Default Option** button on the request dialogs is used.

The request format options are:

- ❑ Row Titles - displays the series code at the head of each row for each series.

- ❑ Col Titles - displays the datatype mnemonic at the top of each column.

- ❑ Headings - displays a general heading for row and column titles, for example, the date of the request.

- ❑ Transpose - displays individual time series data across the Excel spreadsheet in rows. This is particularly useful if you are requesting data over very short time periods or larger reporting frequencies, that is quarterly or yearly. The maximum number of columns that you can use in Excel is 255.

- ❑ Currency - displays an additional column with the title **Currency** and with the traded currency of each selected series.

- ❑ Annualise - adjusts company accounts data over the time period for companies that have moved their end of year dates.

- ❑ Embed - ensures that the request is embedded in Excel as a dynamic, refreshable object when saved. If you do not select this option, the results of the request cannot be refreshed and will remain as plain text/numbers.

- ❑ Refresh Button - displays the **Refresh** button within the request result details. If you do not display this button, you can refresh or edit the request by using the **Request Manager** from the **Datastream-AFO** menu, see page 26.

- ❑ Auto Refresh -enables you to refresh the embedded request automatically upon opening the spreadsheet.

- ❑ Suppress Comments - removes row headings e.g. **Date**, **Type**, **Currency** etc.

Menu options

Two menu options are available:

- ❑ Fast Load - which enables you to launch the Advance for Office Add-In for Excel, only when a Datastream-AFO menu option has been selected. This option enables Excel to load more quickly upon start-up.

❑ ShortCut - which makes the **Static Request**, **Time Series Request**, **Company Accounts Request** and **Request Management** options available from the Excel worksheet right mouse click menu.

Data options

The **Not Available String** field enables you to type the text that you want displayed in Excel when data is not available from Datastream. For example, **#N/A**.

Expression editing

Select the **Show out of date warning** to warn you when expressions have not been refreshed.

Datastream Navigator options

The **Server** field enables you to define the location of the server from which you would like to run **Datastream Navigator**.

Autocorrect options

Select **Delete "..." from the list** to remove Excel's default Autocorrect setting whereby "..." is replaced by ".".

Creating data requests in Excel

Advance for Office enables you to create and issue data requests from within Excel, rather than creating your data requests in Advance and then embedding them in Excel. When you issue a request from Excel, it is passed directly to Datastream, bypassing Advance. The results are returned as dynamic, refreshable objects. This means that your data requests can be saved and refreshed within Excel without having to launch Advance. The breadth of Datastream's historical data is available for use in your spreadsheets. Any number of data requests can belong to a spreadsheet and be refreshed as a batch using the **Request Manager**. See Using the Request Manager, page 26.

The data request creation facilities available in Advance are also available in Excel:

Static Data	Time Series Data	Company Accounts
Series selection - including Datastream equities, market indices, commodities, bonds, interest and exchange rates, investment and unit trusts, warrants and economic series	Series selection - including Datastream equities, market indices, commodities, bonds, interest and exchange rates, investment and unit trusts, warrants and economic series	Series selection - including Datastream equities, constituent lists and Local Lists (that contain equities)
Local List selection - including Advance Local Lists, user created mainframe lists and constituent lists	Local List selection - including Advance Local Lists, user created mainframe lists and constituent lists	Company account formats - including Datastream and Worldscope items
Datatype selection - static datatypes for Datastream, MSCI, I/B/E/S and FTSE	Datatype selection - time series datatypes for Datastream, MSCI, I/B/E/S and FTSE	Local List selection - including Advance Local Lists, user created mainframe lists and constituent lists
Expression selection - including Datastream global and user created expressions	Expression selection - including Datastream global and user created expressions	Format options - including row titles
	Frequency of reported data - including daily, weekly, monthly, quarterly and yearly	
Date of requested data	Start and end dates for display period	Start and end dates for display period with annualise option
Format options - including selection of column and row title and headings	Format options - including selection of column and row title and headings	

Creating static data requests

Static data requests are created using the **Datastream Static Request** dialog to enter your request parameters. Choose **Static Request** from the **Datastream-AFO** menu

The minimum you need to do to create a static data request is select a series, a datatype, and a start date on the **Datastream Static Request** dialog. You can then **Submit** the request to Datastream. The results are displayed directly in the spreadsheet with row and column headings (if selected). The **Refresh** button enables you to edit and refresh the embedded request.

Example - Three series and static datatypes

1 - Click the **Series Navigation button** to display Datastream Navigator. Here you can select a data category of interest (e.g., Equity) and browse through the displayed list or type a few letters to restrict the list.

2 - Click the **Datatypes** button to display the **Datatype Mnemonic Picker.** You can use **Data Type Category** and **Datatype Type** dropdown lists and **Find** to pinpoint the required datatype field.
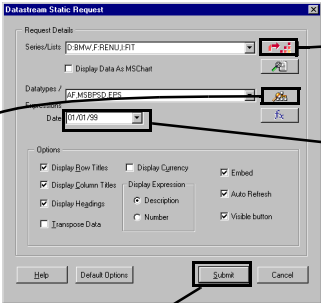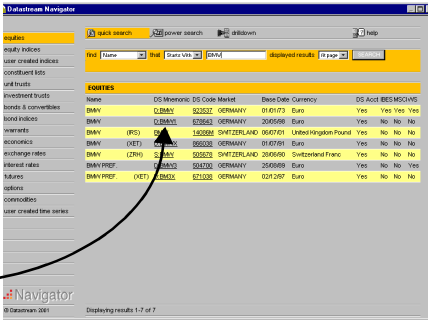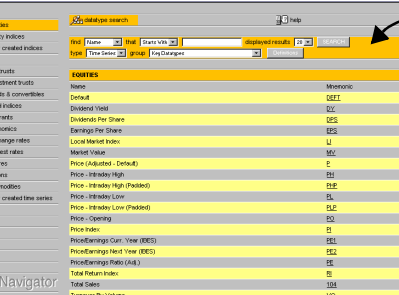
3 - Type the date that relates to the historical data that you want to retrieve.

4 - Click the **Submit** button to issue the request to Datastream.

5 - The results of your static data request are embedded in the worksheet at the current cell position. A **Refresh** button enables you to refresh the details on an ad hoc basis.
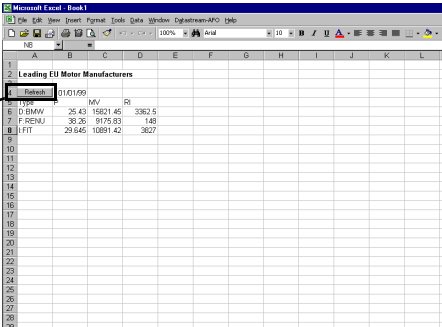
Selecting series

The Datastream Navigator, displayed by clicking the Series Navigation button,

enables you to select individual series. When you select a series, the series mnemonic is copied to the Series field on the Request dialog. Multiple selections are automatically separated by commas.

1 - Select a **Category** from the list.

2 - Type a Name, DS Code or Datastream mnemonic or in the **Search** field to list all series (for the chosen data category) beginning with that word or phrase. For example, entering FIAT lists all stocks that begin with FIAT. You can also use wildcard characters to broaden your search. e.g. *BANK.
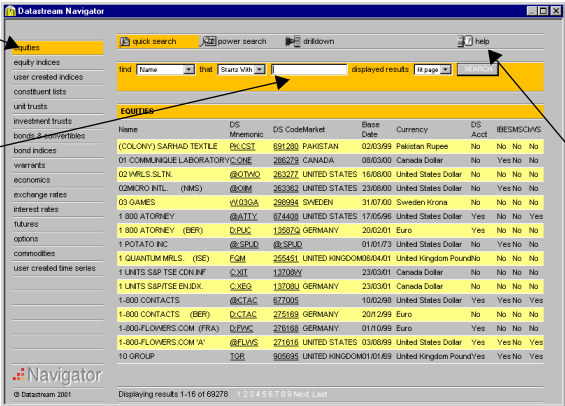
3 - Use the Help button to access the Datastream HELP screens to view country/sector and economics pages.

Selecting datatypes

The **Datatype Mnemonic Picker**, displayed by clicking the **Datatype** button, enables you to select individual datatypes per request. When you select a datatype, the Datastream mnemonic for the Datatype, for example, MV for Market Value, is copied to the **Datatypes** field on the **Request** dialog. Multiple selections are automatically separated by commas.

The following example shows you how to search and select the Datastream equity datatype **EPS** (earnings per share) by typing its mnemonic in the **Datatype Mnemonic Picker**.

1 - Select the **Datatype Category** from the list. You can choose from all the Advance data categories. If your series is an Equity series, (as in this example) you will need to select **Equities**.
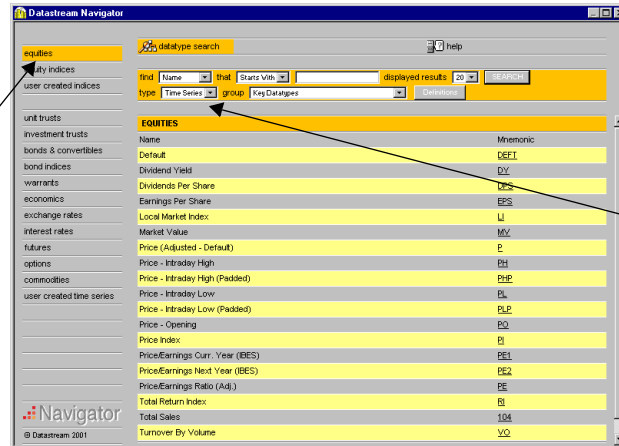
2 - Select the type of datatype you want to use. In this instance it will be Time Series Datatypes, but you can select Static series datatypes from the dropdown list.

3 - When you have selected your Datatype Category and Datatype Type from the dropdown lists, select the criteria you would like to search by e.g. Mnemonic and type the Datastream mnemonic in the **Search** field; for example, eps. The datatype and its description is displayed for selection. Click **the mnemonic** to select it.

If you don't know the Datastream mnemonic for the required datatype but you know the general description, for example Price, choose to find by **Name** and type **Price** in the **Search** Field. This lists all datatypes for the chosen **Data Category** and **Datatype Type** with descriptions beginning with Price (e.g. Price (adjusted), Price (unadjusted), and so on).

Selecting lists

You can use lists stored on your PC (i.e. Local Lists) or remote lists stored on the Datastream host, rather than selecting a number of individual series. These lists include:

❑ Local Lists created in Advance, or Advance for Office, Datastream lists that have been downloaded onto your PC for use in Advance.

❑ User lists (i.e. L#*xxxx* lists) that are stored on the Datastream host system.

❑ Constituent lists; for example, LFTSE100.

See

To select a list, click the **List Picker** button [image], on the **Request** dialog. When you use a list of series for a data request, data is displayed for the selected datatypes for every series in the list in the order that they appear in the list. Selecting a list from the **List Picker** copies the list code into the **Series** field. This could be a list file for Local Lists (e.g. LNSABANK.LLT), a list code for mainframe lists (e.g. L#A74953) or a

list mnemonic for constituent lists (e.g. LNSABANK).

Example - User created list and 3 static datatypes

1 - Click the **List Picker** button.

2 - Select **Local Lists** or **User Created Mainframe Lists** by clicking the appropriate tab.
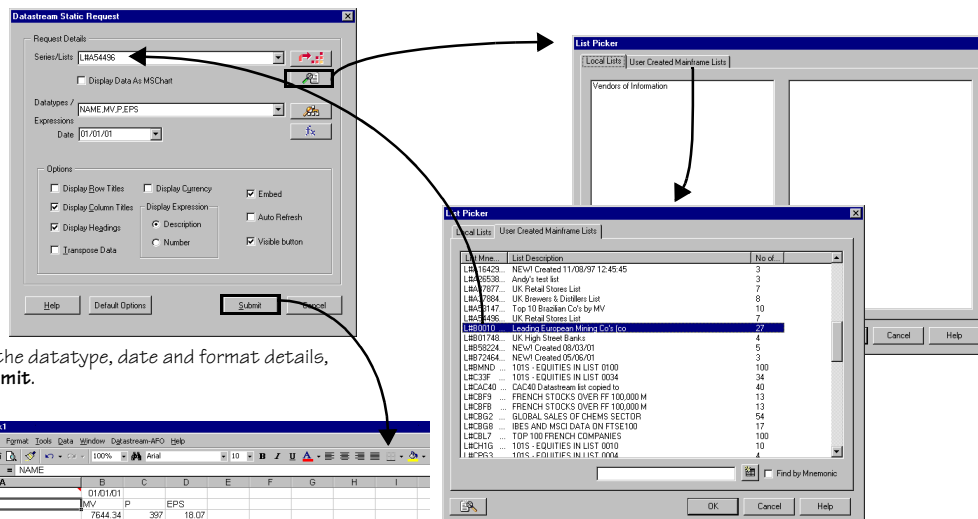
4 -Complete the datatype, date and format details, and click **Submit**.

3 - Select a list and click **OK** on the **List Picker**.

Selecting expressions
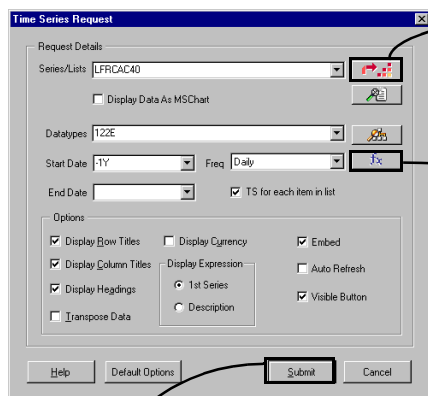
For static data requests, you can browse and select expressions stored on the Datastream host system. The **Static Request Expression Picker**, displayed by

clicking the **Expression** button f_x , on the **Static Request** screen, can display all user created expressions or Datastream global expressions, or both. See Using Expressions, page 23. A **Refresh Grid** button enables you to update the list of expressions held on your PC from the Datastream host system.

Expressions can be used for static data requests where only one symbolic variable is used. For example, PCH#(X,1Y) calculates the percentage change over one year where *X* is either a single series or a constituent of a list that you select.
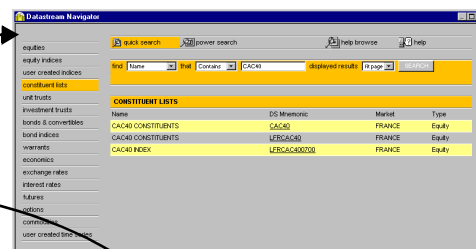
Example - Percentage change over one year of market index constituents

2 - Select a **Constiuent List** *from the list displayed and click* **OK.**
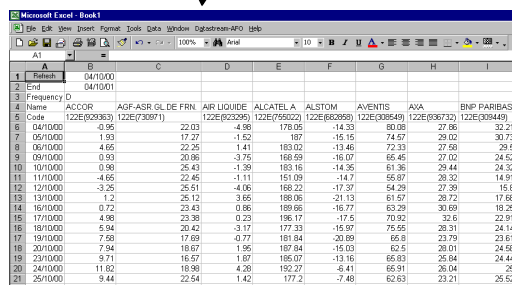
1 - Click the **Series** *button.*

4 - Complete the **Date** *field and click* **Submit** *to issue the static data request to Datastream.*

3 - Click the **Expressions** *button, select an expression from the list displayed and click* **OK.** *Use the* **Show** *dropdown list and* **Find** *field to narrow down your search. Refer to the Definitions help option on the Advance Help menu for descriptions of the functions/expressions displayed here.*

Selecting dates

Dates can be typed as either a fixed date format, that is *dd/mm/yy,* or as a number of days (D), weeks (W), months (M), quarters (Q), or years (Y) ago from today, for example -3D which is three days ago from today.

Note:

If the Date field is left blank, the last value (which may be prior to the date of the request) will be retrieved. You can also enter **TODAY** *in the* **Date** *field to retrieve the latest intraday values. Latest Intraday prices are only available for European equities and indices where real time prices are subscribed to.*

Creating time series requests

You can create time series requests for individual series (e.g. price indices, exchange rates, and expression, etc.) as well as for your Advance Local Lists, User created lists, and Datastream constituent lists. Unlike static data requests, you can specify a time period which can start as far back as data is held for a specific stock right up to the latest value. A **Frequency** format option enables you to define periodicity of the data required.

Time series requests are created by using the **Time Series Request** dialog from the **Datastream-AFO** menu, supplying the required series (lists or expression), datatypes, time period, and frequency, and clicking **Submit**.

Example

1 - Click the **List** button, ensure the **List Type** is set to Local Lists, select the Local List from the left-hand window and click **OK**.

2 - Click the **Datatype** button, select Time Series Datatypes from the dropdown list, select a datatype (e.g. Price Adjusted) and click **OK**.
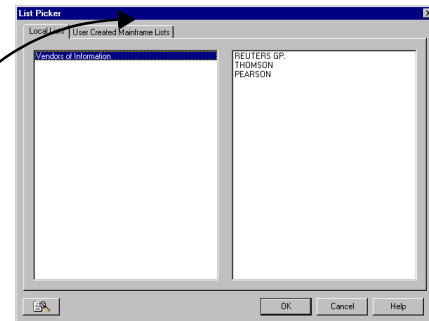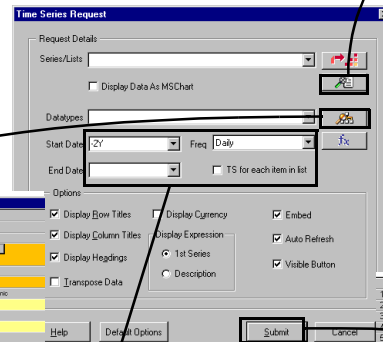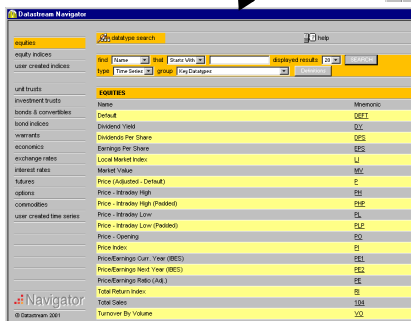
3 - Type the **Start Date** for the reporting period. This can be a date in the format dd/mm/yy or a period relative to the **End Date**, for example - 3Y, that is three years ago from the **End Date**. For time series requests, you can leave the **End Date** blank, this defaults to yesterday's closing values, or before yesterday depending upon the series selected.

4 - Click the **Submit** button to issue your request to Datastream. By default, the series are displayed in rows and the time series data in columns. For long frequencies and short time periods, use **Transpose** to display the data in rows.

Using lists with time series requests

When you use a Local List, a Datastream list, or a constituent list with a static data request, between one and ten datatypes are returned for each series in the list. When you use a Local List, a Datastream list, or a constituent list with a time series request, a sequence of data (i.e. the time series datatype and frequency) is returned for each constituent. See Creating local lists, page 22

To indicate that you want a time series on each datatype that you enter, you must click the **TS for each item in list** check box.

Using functions and expressions with time series requests

Selecting expressions

For time series data requests, you can browse and select expressions stored on the Datastream host system. The **Time Series Data Request Expression Picker**,

displayed by clicking the **Expression** button , on the **Time Series Request** screen, can display all user created expressions or Datastream global expressions, or both. See Using Expressions, page 23. A **Refresh Grid** button enables you to update the list of expressions held on your PC from the Datastream host system.

Expressions can be used for time series requests where only one symbolic variable is used. For example, PCH#(X,1Y) calculates the percentage change over one year where *X* is either a single series or a constituent of a list that you select.

Creating company accounts data requests

In addition to static and time series data, Datastream and Worldscope company accounts data can also be requested and displayed within Excel. The request creation facilities specific to company accounts data enable you to retrieve company accounts data for equities, Local Lists, and constituents over a specified time period.

You can adjust the company accounts data over the time period, using the **Annualise** facility, for companies who have moved their year-end dates. You can also select from a list of company accounts formats, including Datastream and Worldscope preset formats. For example, financial ratios.

To create a company accounts data request, select **Company Accounts Request** from the **Datastream-AFO** menu. Select an equity series, local list or constituent list, select a format, specify a time period and click **Submit**. **Annualise** and **Format Options** are optional.

Example - Industrial company accounts for Alcatel

1 - Click the **Series Navigation button** to display the **Datastream Navigator**. Use the **Category** dropdown list to display Equity, Local Lists, or Constituents.

2 - Click the **CA** button to display the **Format Code Picker**, and select a Global or User format.

3 - Type the **Start** Date and **End date**. The **Start Date** can be typed in the form -nY to download accounts data for the period n years, or in the form -nYE to download accounts data for n year ends. -nY retrieves data for 12 month periods, whereas -nYE retrieves data for accounts year ends (which may be greater than 12 months). Leave the **End date** blank if you want to display the latest values stored on Datastream. If an accounts year covers a period other than 12 months, click **Annualise** to convert the actual figures to an annualised basis.

4 - Click the **Submit** button to issue the request. The labels for the data are displayed in rows by default.

Short cuts when entering request details

The data request dialogs have two features that enable you to speed up your typing of request parameters. These are:

❑ Series, datatype, and date dropdown lists

This feature enables you to select from a dropdown list, under the **Series**, **Datatype** and **Date** field, series, datatypes and dates that you have previously used in one Excel session. Simply click on the dropdown list and select a series, datatype or date to copy it into the field.
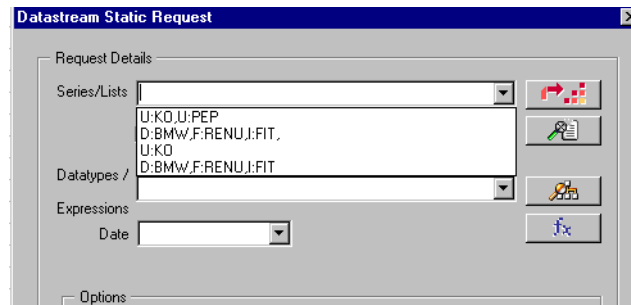
❑ Select last request parameters

You can re-insert the parameters for any of your previously used requests by right-clicking the mouse over the **Series Navigation button** and selecting the request details from the displayed list, for example:
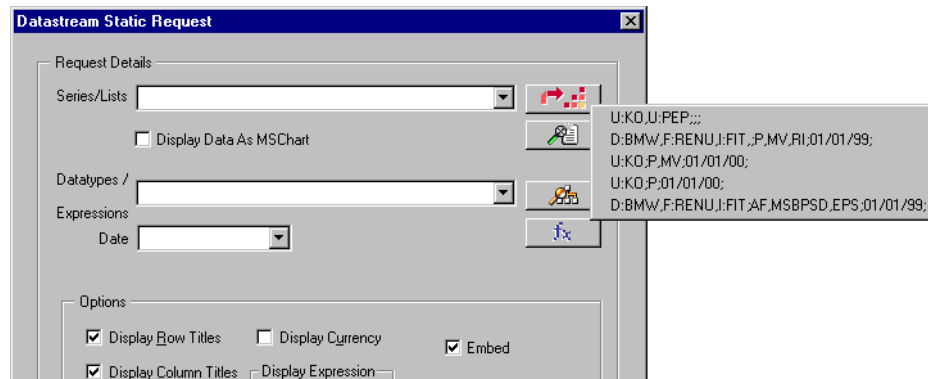
Selecting the request details from this list inserts all the details in the relevant fields. Click **Submit** to issue the request.

Format options

Format options for static and time series requests

Format options are available on the **Static Request** and **Time Series Request** dialogs. These options enable you to choose how to display the data and what you can do with it. Check the check boxes to select the options.

Select, or deselect, the required format options and click the **Submit** button. The selected options are displayed when you make a request.

Click the **Default Option** button to return the format options back to their default settings, which are made on the **Options** dialog from the **Datastream-AFO** menu.

Select **Display Data as MS Chart** to chart your data using Microsoft Chart - if the embed option is selected, a **Refresh** button is placed in the chart.

Format options for company accounts requests

As company accounts request formats dictate the layout of the presented data, you can only turn on/off the row titles. For example, the company account code numbers for each item. All data is presented as if **Transpose** is selected, that is, data is displayed for each item across the spreadsheet in rows.

Editing an embedded data request

There are two ways to edit data requests embedded in Excel. You can use the Request Manager to view the details of all data requests embedded in your worksheet, edit the details, and resubmit the requests that are of interest to you. See Using the Request Manager, page 26, for further details.

The quickest and most convenient method of editing an embedded data request in Excel is to right-click the mouse over the top left-hand corner of the request to display the edit menu. If you originally issued the request with the **Visible** format option turned on, you can right-click on the **Refresh** button to display the edit menu. If the **Visible** option was turned off, use the **Comments** option from the Excel **View** menu to locate the top left-hand corner of the request. For example:
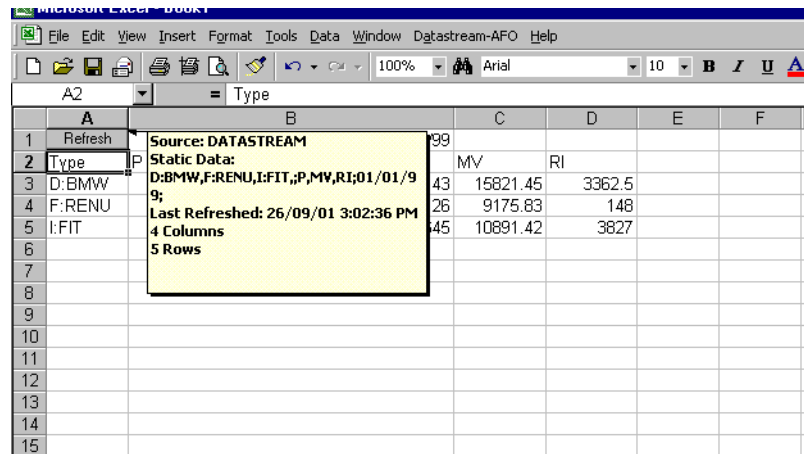
When you have located the top left-hand corner of your embedded request, right-click to highlight the whole request and display the edit menu.
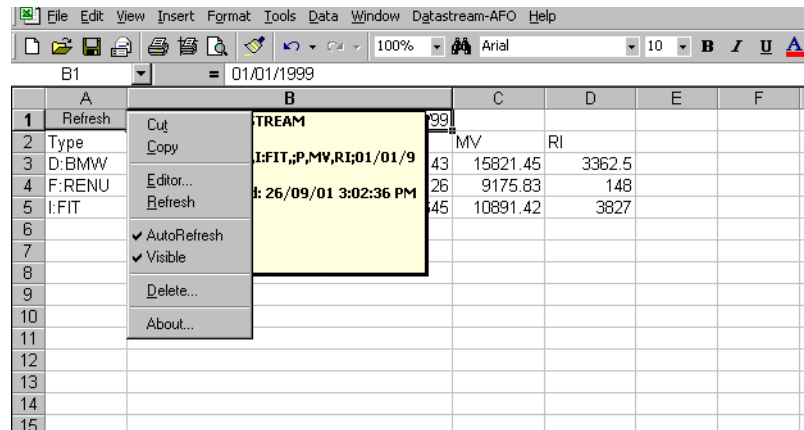
Use the following options to edit the request:

Cut

Cuts the entire details of the embedded request to the Windows clipboard for pasting into other worksheets or workbooks. Note that when using the **Cut**, and subsequent **Paste** options, only a copy of the data is pasted into the new location or worksheet, not the underlying embedded request.

Copy

Copies the selected data request for pasting into other worksheets and workbooks. Note that only a copy of the actual data is taken when this option is selected.

Editor…

Edit the actual parameters that make up your static, time series, and company accounts data requests. When you select this option, a dialog is displayed for the type of request you are editing, with the details of the request. The following example shows the editing dialog for a company accounts data request.
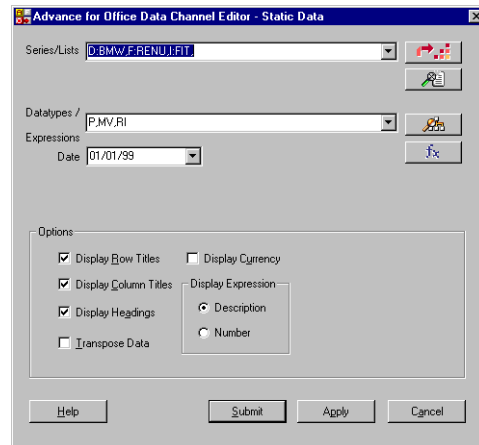
Make your changes and click **Apply** to save the changes without issuing the request, or click **Submit** to issue your changes to Datastream straight away.

Refresh

Refreshes the selected data request with the latest Datastream values and data. It is used for ad hoc refreshing of individual data requests.

AutoRefresh

This option switches on the **AutoRefresh** option for the selected data request. While **AutoRefresh** is selected, the data request is refreshed every time the worksheet is opened.

Visible

This option enables you to hide, or show, the **Refresh** button.

Delete

Deletes the selected request from the worksheet.
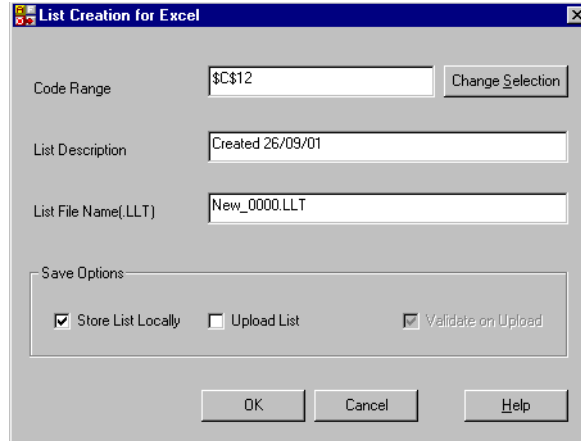
You can also use Excel to edit the embedded request. For example, you can cut and paste the request into other worksheets or spreadsheets, format titles, rows, etc., and sort specific columns or rows in ascending or descending order.

Using lists

Creating Local lists from a range of cells

To create a local list:

1   Select **Create List** from **the Datastream AFO>Tools** menu.
The **Datastream List Creation** dialog is displayed.

2   Select the Code Range from the **Code Range** field.

3   Select or overtype the List Description from the **List Description** field.

4   Select or overtype the List File Name (.LLT) from **the List File Name** field.

5   Check that the **Store List Locally**, or **Upload List** box is ticked.

6   Click **OK**.

When you have saved your list, the list is held locally on Advance, or on the mainframe system, and is available for immediate use.

Note:

The local list facility in the Request Table enables a range of codes to be linked to a local or user list on the central system and to be regularly updated.

Using Expressions

The Expression Picker

You use the Expression Picker to select expressions. Click the **Expression Picker** button, to display the **Expression Picker** dialog.

The Expression Picker dialog

Show:

Use the **Show:** drop down box to display: all, local, or global expressions.

Search

Type either the first few letters of the title, or expression in the **Find:** field.

New Expression

Click the **New Expression** button to display the **Expression Builder,** which you use to create new expressions.

Delete

Click the **Delete** button to delete the selected expression from Datastream.

Edit

Click the **Edit** button to edit an expression you have created in the **Expression Builder**. You cannot edit a Datastream global expression, but you can use it as a starting point for making a new local expression.

Refresh

Click the **Refresh** button to up-date the list of expressions held on Advance. The **Grid Last Downloaded:** date and time tells you when the list was last downloaded.

A list of all the expressions available is displayed in the **Expression Picker** dialog. Each time you create a new expression this list is automatically updated. When new Datastream global expressions are created, you need to download them from Datastream using the Refresh facility.

Using the Expression Builder

You can create and edit your own expressions using Advance's Expression Builder, where you can select the individual components that make up your expressions.

The Expression Builder dialog

❑   The left window is the work area where you build your expression. Each element of the expression, for example, a series, is shown as an individual line, which you can edit. Each line element is described in the adjacent window.

❑ Use the buttons on the toolbar, left of the work area, to enter the individual elements (e.g. series, datatypes, numbers) that make up your expression.

❑ The work area cursor draws a rectangular box around line elements that are logically grouped. For example, inserting the function LAG# into the expression also inserts a symbolic series X and a time period. If you delete LAG#, you will also delete the series and time period that belong to it.

❑ As you build up an expression (max. 78 characters), the expression formula is displayed in the **Expression** field for checking.

❑ Expert users can type their expressions in the Expression field - pressing **ENTER** then expands the expression into the work area, which can then be edited.

❑ The description you type in the **Expression Title** field (max. 30 characters) will be saved along with the expression details and displayed in the **Expression Picker** for identification.

Tools available in the Expression Builder

 Function

The **Select a Function** dialog is displayed. Select a specific Datastream function, the function and its parameters (e.g., start and end dates) are inserted into the workspace area.

 Existing expression

The **Expression Picker** dialog is displayed. Select an existing Datastream global expression or local expression to add to your expression. For example, if you want to nest one expression into another. Only expressions with no symbolic substitution are allowed.

 Series

Datastream Navigator is displayed. Select a 'static' or 'symbolic' series to add to your expression. You can use the **Change Filter** facility to select a simple or an extended series filter.

 Number

The **Enter Number** dialog is displayed. Add a number to your expression. A number occupies its own line in the workspace area, typically after a math operator. Double click the displayed number to enter another value.

Datatype

The **Datatype Selection** dialog is displayed. Add a datatype after a 'static' or 'symbolic' series. You can use the **Datatype** dropdown list and mnemonic search to select and add a specific datatype.

Currency

The **Currency** dropdown list is displayed. Select a different display currency for a 'static' or 'symbolic' series. The currency you select is used for the new expression until you modify it.

Dates

Edit the start and end dates for a selected function. The work space cursor must be positioned over a date variable line. You have the same start and end date options as you have for normal requests.

Math Operator

Add parenthesis or math operators to your expression. Position the workspace cursor at the insertion point and click an operator button.

Delete

Delete parts of your expression. For example, details contained within parenthesis. Position the workspace cursor at the point of deletion and click this button to logically delete expression details.

Undo

Undo your last action in the expression builder workspace. For example, undo the last series added to the workspace.

Using the Request Manager

You can create and embed any number and type of data and chart requests in a single worksheet. For example, a worksheet could contain an embedded time series data request, a static data request, a company accounts data request, and an embedded Advance chart all for the same series and time period. If you want to change the time period for one request, you would need to search through the worksheet to find the required request and use the right-mouse click **Edit** option. The **Request Management** facility, however, enables you to quickly pinpoint the required request and edit, refresh, autorefresh, or delete its details.

The **Request Manager** dialog, displayed by selecting **Request Management>Request Manager** from the **Datastream-AFO** menu, displays details of all embedded requests within an Excel workbook. To edit, refresh, or delete a request, click on the request's detail line and click the appropriate button.

Click a tab to view details and select options for either embedded data or chart requests.

*Click the **AutoRefresh** button to turn On/Off autorefresh for individual or all selected requests.*

*Each line of the **Request Manager** dialog represents one request. The details include the mnemonics of the series, the cell/row location in the worksheet, the type of request and whether **Autorefresh** is turned **ON** or **OFF**.*

*Click the **Select All** button to select all the requests displayed on this screen. This is useful if you want to Refresh or Delete all requests.*

*Click the **Goto** button to locate the selected request within the worksheet.*

*Click the **Edit** button to display the **Request type** dialog with the details of the selected request for editing.*

Click the Delete button to delete the selected request(s).

Click the Refresh button to refresh the values/data of the selected request(s).

Editing an embedded chart using the Request Manager

For users who are familiar with the Datastream Research service and Datastream series codes, the Request Management facility gives you access to the underlying request parameters for embedded charts. On the **DS Charts** tab, the **Edit** button, enables you to display and edit the request parameters that are actually sent to Datastream.

Note:

You must be familiar with Datastream codes and request syntax before editing these details.

To edit the request parameters for an embedded chart:

1   Open the worksheet with the chart you want to edit.

2   Select **Request Manager** from the **Datastream-AFO>Request Management** menu.

3   Click the **DS Charts** tab.

4   Select the chart that you want to edit by clicking on the appropriate request details line. For example:
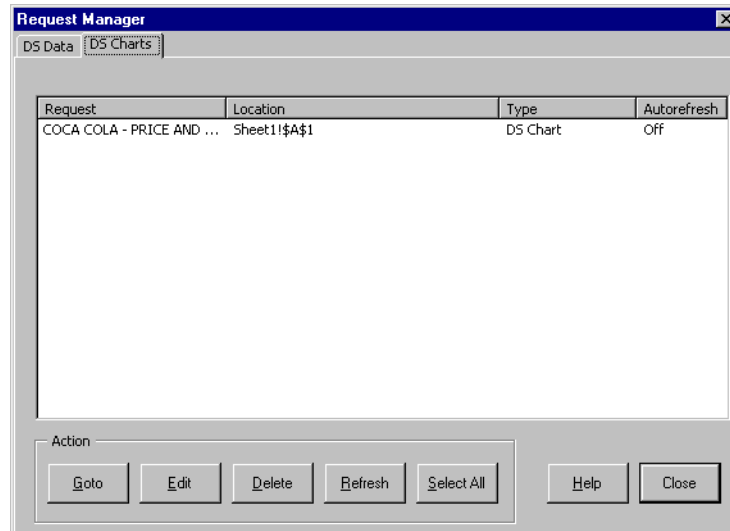
5   Click **Edit**. The **Edit Chart** dialog is displayed with the parameters of your embedded chart request, for example:

Edit Chart

Enter new request string and description in fields below

Chart Request String

682X Z48G(904282, 904282(LI), -6M, -0D)

Chart Description

COCA COLA - PRICE AND PRICE RELATIVE CHART

[Help]   [Submit]   [Cancel]
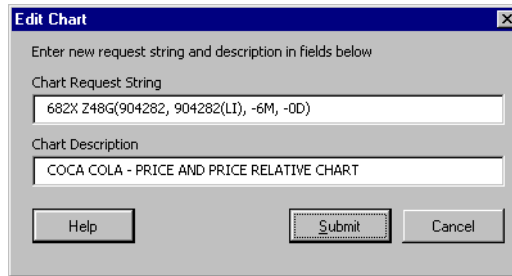
6   Change the Datastream series code(s) (e.g. 900479 = GLAXO, datatype P = Price (Adjusted)) as required.

7   Change the **Chart Description** as required and click **Submit** to re-issue the chart request to Datastream. The DS Access Monitor will be displayed if it is switched on. When the chart details have been successfully updated, click **Close** on the **Request Manager** screen.

To enter Visual Basic Design Mode:

1   Click on the **Design Mode** button .

2   When you are in Visual Basic Design Mode, the embedded chart appears with 'handles' at the corners and sides of the object when you click on it.

3   Use these handles to stretch or reduce the size of the embedded object, vertically, horizontally and diagonally.

Whilst your Excel document is in Visual Basic Design Mode, you can also cut and paste the embedded chart to a new location within your worksheet. Click on the chart, click the **Cut** button, move the Excel cursor to the new worksheet location and click **Paste**.

To exit Visual Basic Design Mode and return to Excel's Normal view mode:

1   Click the **Design Mode** button.

2   Close the Visual Basic tool bar.
Remember to save your changes before quitting Excel.

Changing the properties of a chart using VBA

Experienced users can use Excel's VBA Design Mode to access and edit the properties of embedded charts the **Properties** dialog. On the **ChartControl Properties** dialog you can change the request description, request string, autorefresh selection and chart dimensions.

To change the properties of a chart using VBA:

1   Right-click on the Excel tool bar and select **Visual Basic**.

2   Click the **Visual Basic Design Mode** button on the **Visual Basic** tool bar.

3   Click on the chart that you want to edit.

4   Right-click on the chart to display the Excel menu and select the **DatastreamChart>Properties** option.

The **ChartControl Properties** dialog is displayed:
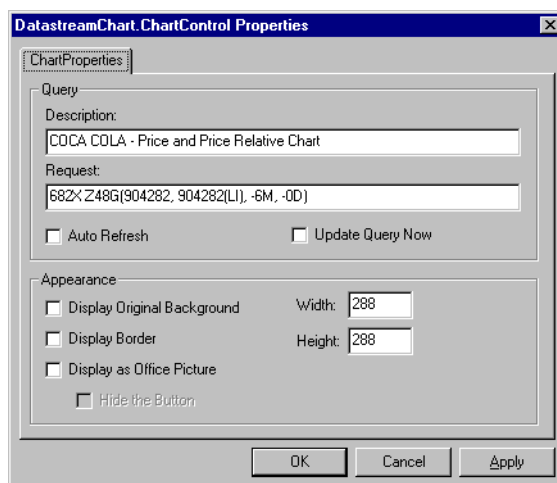
5   Change the properties as required, click **Apply** to confirm your changes and click **OK** to exit the **Properties** dialog.

Refresh the chart for the new properties to take effect.

Using the Request Table

What is the Request Table?

If your use of Excel involves transferring and presenting large amounts of data from Datastream on a regular basis for the same series, you can use the Request Table to create batches of refreshable data requests. The request table is an Excel template with additional facilities for entering request parameters as individual Excel rows. These parameters include:

Whether the request will be updated.

How the request data will be laid out in the spreadsheet, e.g., with row and column headings.

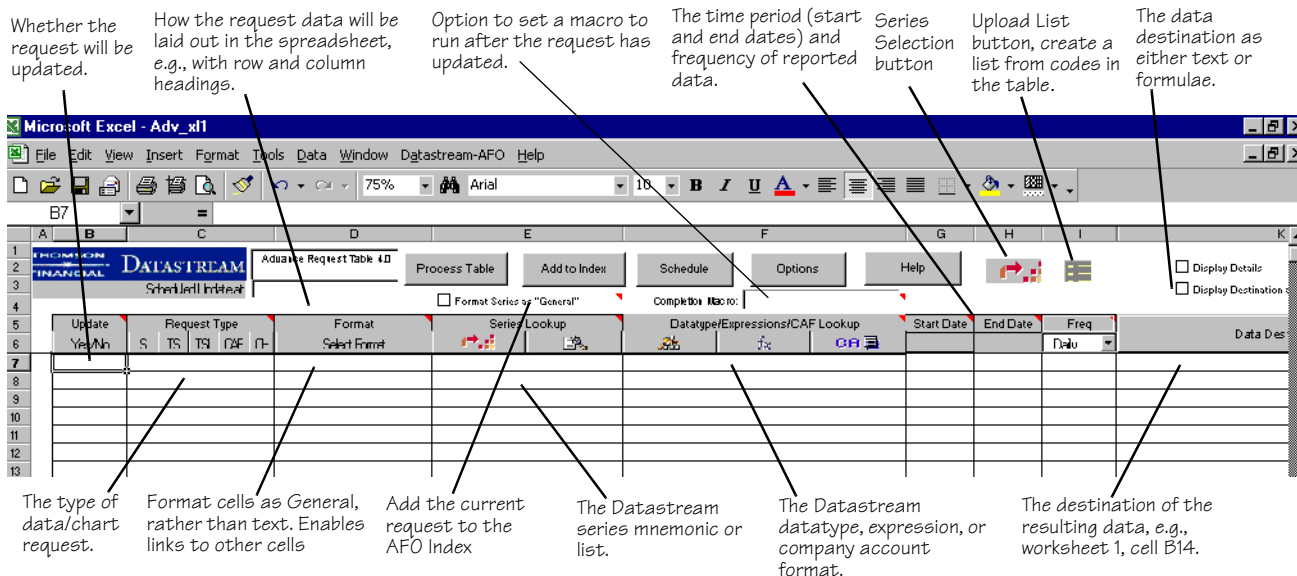Option to set a macro to run after the request has updated.

The time period (start and end dates) and frequency of reported data.

Series Selection button

Upload List button, create a list from codes in the table.

The data destination as either text or formulae.

The type of data/chart request.

Format cells as General, rather than text. Enables links to other cells

Add the current request to the AFO Index

The Datastream series mnemonic or list.

The Datastream datatype, expression, or company account format.

The destination of the resulting data, e.g., worksheet 1, cell B14.

Creating and storing regularly used Datastream data or chart requests in the form of a table enables you to:

❑ Enable/disable individual requests when they are required/not required.

❑ View the details of all requests in one glance.

❑ Reference request input parameters from other worksheets.

❑ List requests in the table in the order they need to be processed (to use returned values as input parameters in subsequent requests).

❑ Specify different cell and worksheet references for individual requests.

❑ Schedule the request table to be processed in the future and 'out of hours'.

❑ Continue processing, even if a datatype within a list of datatypes is invalid.

❑ Add a description against each row in the table.

❑ Copy a code button onto work sheets to access the series/datatype lookup.

❑ Link to charts and data.

Creating a batch of requests

To create a batch of requests using the Request Table:

You can insert the resulting data, using **Data Destination**, into other worksheets within the same or different workbooks.

1 Select the **New Request Table** option from the **Datastream AFO>Request Table** menu.

2 You are now prompted to save the request table under a new name. Click **Yes**, supply the Request Table name and directory location, and click **Save**.

Note:

It is important that you do not overwrite the default Request Table template (Adv_xl.xlt) as this will form the basis for all your Request Table generation. We recommend that you make a back up of the template which is installed with Advance in the location: C:\Program Files\Datastream\Datastream Advance.

The next stage in creating a batch of data or chart requests is to enter the request parameters as a single row in the worksheet labelled **Request Table**. To create other rows (i.e. data requests), repeat the following steps for each request you wish to add.

1 Click on the worksheet tab labelled **Request Table**. An empty Request Table is displayed.

2 Click the **Yes/No** button to select the **YES** option - that is, refresh this request. This option can be turned off by clicking the **Yes/No** button again, where the cell contents will change to **NO**.

3 Select a Request Type by clicking the appropriate button. The buttons are:
   - **S** = Static data request
   - **TS** = Time series data request
   - **TSL** = Time series list data request
   - **CAF** = Company accounts data request
   - **CH** = Chart request

4   Select a Format layout type from the dropdown list. You can select:

Format options	Worksheet codes
No headings	**X**
Row and column headings	**RC**
Titles with row and column headings	**RCH**
Titles with row headings	**RH**
Row and column data transposed with no headings	**T**
Row and column data transposed with row headings	**TR**
Row and column data transposed with column headings	**TC**
Row and column data transposed with row and column headings	**TRC**
Data annualised for company accounts data items	**A**

In addition to the above formats, you can display the currency of the series selected in your request table. This format option is selected by clicking the **Always Include Currency** check box on the **Options** dialog. See *Request Table options*, page 30. This feature is primarily intended to provide compatibility with earlier versions of the Request Table. If the **Always Include Currency** option is selected, any format options selected will have the currency symbol ($) appended to the worksheet code; for example **RC$**.

5   Select series or lists (i.e. Local Lists, Datastream mainframe lists and constituent lists) using the Series Lookup buttons. If the Request Type you selected is **S** or **TS**, click the **Series Navigation button** to display the **Series Selection** screen (see *Selecting Series,* page 10). You can select any number of series. If the Request Type you selected is **TSL**, click the **List Picker** button to display the **List Picker** (see *Selecting lists*, page 11).

6   Select a datatype, expression or company accounts format (CAF) by clicking the appropriate button. If you have selected Request Type **S**, you can select datatypes (see page 10) and expressions (see page 12). If you have selected Request Types **TS** and **TSL** you can only select datatypes. If you have selected Request Type **CAF**, you can select company account formats (see page 16).

7   Place the cell cursor in the next adjacent cell, e.g., G7, and enter either a fixed start date in the form dd/mm/yy, a relative start date in the form -*n*Y (that is *n* years ago from the **End Date),** or -*n*YE to retrieve accounts data for *n* year ends. For static data requests, this field is used to specify the date for which the data is to be requested. When requesting latest values for static data for company accounts items (i.e. 104) and economic codes, you must enter a space in the **Start Date** field.

8   Place the cell cursor in the next adjacent cell, e.g., H7, and specify an **End Date** in either a fixed date or relative end date format. This date is only needed for time

series and company accounts requests and can be left blank to specify previous day values.

9   Place the cell cursor in the next adjacent cell, e.g., I7, and select a data frequency from the dropdown list. The options are:
   •   Daily
   •   Weekly
   •   Monthly
   •   Quarterly
   •   Yearly

10   Place the cursor in the next adjacent cell, e.g., J7. The next step is to specify where the result of the data request is to be inserted. This can be a specific cell location in any new worksheet within the same workbook, or a specific cell location in a different workbook. To specify a cell location in a worksheet within the same workbook:
   •   Insert a new worksheet from the **Insert** menu.
   •   Click on the **Request Table** tab
   •   With the cell cursor at J7, click the **Data Destination** button. The **Create Destination Reference** screen is displayed. Click on the required worksheet tab and then click on the required cell location to automatically paste the cell reference into the dialog, for example:
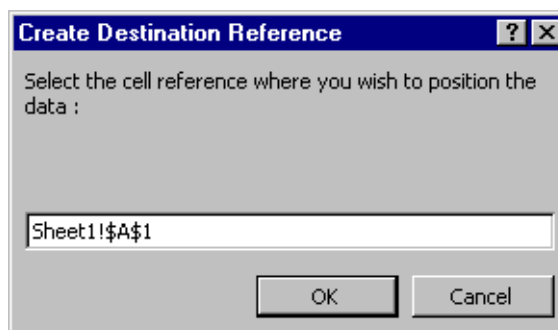
   •   Click **OK** to insert the cell reference into the request table.

   If you want to specify a cell reference in another workbook, simply click the **Data Destination** button, open the required workbook, activate the required cell and click **OK** on the **Create Destination Reference** screen.

11   You must now choose whether you want the data destination cell location to be displayed as either plain text reference or as a dynamic Excel formula. If you select the **Display Destination as reference** option, this enables the position of the data results to be moved in the worksheet (e.g. after inserting a new row or column). If you select this option, any future processing of the Request Table will take into account the new cell location. If you do not select this option, the data will always be inserted at the same cell location.

If the destination reference is to a closed external workbook, you must ensure that the **Display Destination as reference** check box is selected to enable the request table to open the workbook. This is particularly important if you are scheduling the Request Table to be refreshed 'out of hours' and the Request Table contains references to external workbooks that will be closed when the process is run.

12   Skip the cell column for **Status** as this is used by Datastream to inform you of the status of the latest update of this request. **OK** indicates the update has been successful.

13   Place the cursor in the next adjacent cell, e.g., L7, and enter a short (optional) description for the request.

14   To add a chart request to the table, click the **CH** button. This displays all charts in open workbooks. Select the chart required and the request string will be entered in the **Series Lookup** cell and the nearest cell entered in the destination cell.
Note the series used in the request string can be linked via a cell reference.

15   From the Excel **File** menu, select **Save** to save the details of your Request Table.

The request is now ready to be processed.

Request Table options

The Request Table can be configured to always display the currency of the selected series and show your own entered text (e.g, N/A) where data is not available from Datastream. The **Always Include Currency** option is provided to ensure compatibility with data tables created with previous versions of the Request Table, i.e., DSDDE tables. Selecting this option makes it possible to use DSDDE tables where the currency is always returned. You are also able to define which AFO Index you would like to add your table to.
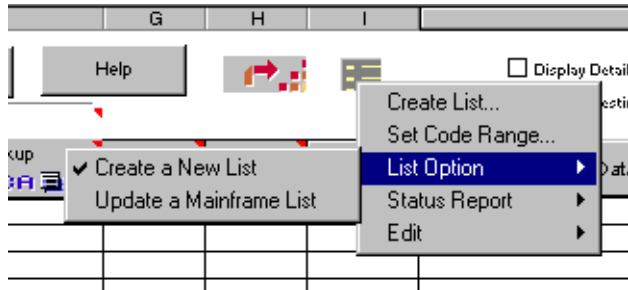
To configure these options, click the **Options** button to display the **Options** dialog.
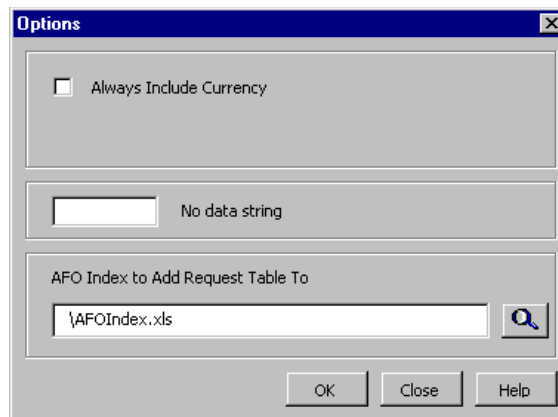
Select your Request Table options and click **OK**.

Upload List button

The **Upload List** button in the request table can be copied to a sheet that has back office codes to upload. There are two modes that can be configured by right clicking on the button and selecting the **list option.**

You can create either local or mainframe lists using the **Create a new list** option, see page 22, for details.

Or you can use the same mainframe user list (L#XXXX) each time the back office list in the spreadsheet is amended by using the **Update a Mainframe List** option.

Double click the button to display the list details and to update the list.

The Series Navigation button

You can link the **Series Navigation button** [image] to a cell in the Request Table, giving you access to the Advance series selection dialogs (for all series including user lists). Double click on the **Series Navigation button** on the spreadsheet to select a different series.

Processing and Scheduling batch requests

You can choose to either process your Request Table straight away or schedule the processing at some date and time in the future.

To process your Request Table straight away, click the **Process Table** button. This will launch the DSAPI which will pass the request details to Datastream in the order that they appear in the list. Requests that fail, for example the datatype is not suitable for the request, will not prevent the whole batch of requests from being processed. Only the **Status** field will be updated for failed requests.
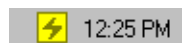
The progress of the update process can be monitored via the **DS Access Monitor**. You can set up the **DS Access Monitor** to be automatically displayed during processing by using the **Configure Communications**, accessed by right-clicking the lightning symbol in the system tray. Refer the *Reference* chapter of the *Advance User Guide* for more details.

To schedule the Request Table for processing out of hours, click the **Schedule** button. The **Request Table Scheduler** dialog is displayed. Enter a date and time in an Excel date format, for example:
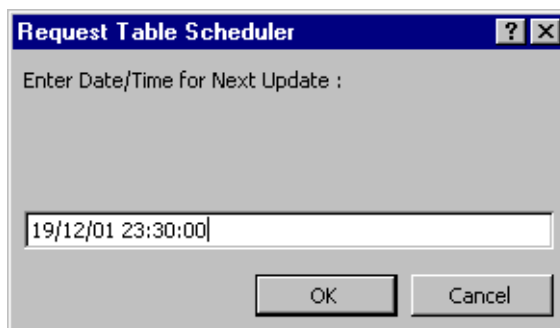
You can process the Request Table later TODAY by entering just a time. Click **OK** to confirm the scheduled date and time. The **Scheduled Update** display window in the request table is automatically updated to indicate that the Request Table has been scheduled.

The message **Next Update Scheduled for:** DD/MM/YY HH:MM:SS will also appear on the Excel status bar. Note, you must ensure that Excel is running and the relevant Request Table is open prior to the scheduled date and time, for the requests to be processed. The destination workbooks do not need to be open as the main table will open all relevant worksheets provided **Display Destination as reference** has been selected for the relevant requests.

The AFO Index

The AFO Index spreadsheet enables you to schedule several request tables to run at a preset time and date. These tables are opened, updated, and closed when the AFO Index is run.

Using the AFO index with a 3rd Party scheduler

You can use a 3rd party scheduler to run the requests in the AFO index. For example, **Schedule Tasks** installed with Internet Explorer 5.

To use the AFO Index:

❑   Click the **Run on startup box** and **Close down after processing** box.
    This opens the AFO index at the preset time, runs the requests, and closes the table on completion.

If you want to stop the AFO index from updating the specified request tables after you have opened it, you have 5 seconds to uncheck the **Run on startup** box.

Note:

The AFO Index only works with request tables.