Datastream Advance 4.0

User Guide

Issue 2
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Making Requests

Making a Request

The following procedure shows you the general steps to follow to make a simple chart, report, or data format request.

For an interactive step by step demonstration, see the Advance 4 tutorial, select Advance Tutorial from the Help menu.

To make a request:

1. Select the category of series – see Data categories, page 2
2. Select the series – see Selecting a series, page 3
3. Select the type of request – see Selecting types of request, page 9
4. Select a chart, report, or data format from the list displayed
5. Refine your request
   • Select the display period, see Display period adjustments, page 11
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   • Use Advance for Office, see the Advance for Office user guides for more details.
Selecting a data category

Datastream series are stored in a database and are accessed using Datastream Navigator. The series are grouped into 18 data categories, which are selected from the Category drop down list. Selecting a data category gives you access to all the series within that category.

![Category dropdown box](Image)

Click to list the categories and select one from the list.

You can select:

- Equities
- Equity indices
- User created indices
- Constituent lists
- Local lists
- Unit trusts
- Investment trusts
- Bond and convertibles
- Bond indices
- Warrants
- Economics
- Economic reports/charts
- Exchange rates
- Interest rates
- Futures
- Options
- Commodities
- User created time series

To select a data category:

1. Click the **Category** drop down box.
2. Scroll through the categories listed and select the one you want.
Selecting a Series

Use Datastream Navigator to find and select the series you want, or if you know the exact Datastream mnemonic or code, or SEDOL, ISIN, or other Datastream supported code, check the Expert entry check box and type the mnemonic or code in the Series field to select your series.

Expert entry

Use expert entry if you know the exact Datastream mnemonic or code, or SEDOL, ISIN, expression, expression code, or other Datastream supported code for the series you want.

To select a series using expert entry:
1. Check the Expert entry check box.
2. Type the exact mnemonic or code in the Series field.
   The series chosen is displayed in the Series & Datatype selected box.

Recent Series

You can use the Recent series drop down box to select from the last 12 series used.

Note:
You can also type the first few characters of the name in the series field and press ENTER. The Navigator Screen is displayed with series matching your search criteria.
Using Navigator

**Datasync** gives you the options to use quick search, power search, and drill down to find your series.

**Quick search**

Quick search is the most basic search. Use this to search by the name, mnemonic, or Datastream code of the series you are looking for.

**To find and select a series using quick search:**

1. Click the **Series navigation** button. The **Datasync** is displayed.
2. Select the **quick search** button.
3. Select name, DS Mnemonic, DS Code, SEDOL, ISIN, Local code, or IBES Ticker from the **find** drop down box.
4. Select starts with, or contains from the **that** drop down box.
5. Type the first few characters of the name, mnemonic, or code in the **Search** field.
6. Click the **Search** button. The series matching your search are displayed.
7. Select the series that you want from the list displayed. The series chosen is displayed in the **Series & Datatype selected** box.

If the series you are looking for is not displayed, edit the text in the **Search** field and click the **Search** button to repeat the search.
Power search helps you speed up the search for your series by using search criteria. Use power search to create your own search criteria.

To find and select a series using power search:

1. Click the Series navigation button. The Datastream navigator is displayed.
2. Click the power search button.
3. Select the search criteria from the find drop down box.
   To add a search criteria for:
   - Name
   - DS mnemonic
   - DS code
   - SEDOL
   Select starts with or contains from the that drop down box.
   Type the search criteria, eg coca, in the field and click the add to criteria button.
   To add a search criteria for:
   - Market
   - Currency
   - Source
   - Class
   - Frequency
   - Primary Quote
   - Unit
   - Type
   - Key indicator
   - Adjustment
   - Borrower
   - Adjusted prices
   - Call/put
   - From curr
   - To curr
   - Country
   - Exchange
   Select a value from the list displayed to add it to your search criteria
   OR
   Select starts with, or contains from the find market/currency/etc that drop down box.
   Type the search criteria, eg united, in the search field and click the search button.
   The options matching your criteria are listed.
   Either, select one of the criteria from the list displayed
   OR
   Edit the criteria in the field and search again.
4. Click the show criteria button to display your criteria.
5. You can add or delete criteria in the list.
6. When the list is complete, Click the search button to display the series meeting your criteria.
Drill down

For equity and economic series, you can use drill down to search for your series. This enables you to search the database hierarchically by countries and sectors.

To select a series using drill down:

1. Click the Series navigation button.
   - The Datastream navigator is displayed.
2. Click the drill down button.
   - The Filters dialog is displayed.
3. Select a folder in the left pane, its contents are displayed in the right pane. You can keep drilling down until no further selections can be made in the left-hand window.
   - The path is displayed at the top of the right pane.
4. Select the series you want and click OK.
Using the Datastream Help Browser

For the data categories: indices, constituents, bond indices, interest and exchange rates, economics, options, and futures, you can use the Datastream help browser to display Datastream help on mnemonics and weekly economic series. The browser enables you to navigate through Datastream help pages to display and select the required mnemonic for a request.

You can use the Datastream Help Browser when the help browse button appears on the Navigator screen.

Click the help browse button to display the Datastream help browser screen.

To select a topic, double click on the option number, or enter the option number in the Go To field and click the Go To button.

Use the navigation buttons to move forward or back though the help pages.

When you have selected the mnemonic, click Finish to paste the mnemonic into Advance.
To use the Datastream help browser:

1. Click the **help browse** button.
2. Double-click on the option number
   OR
   Type the option number in the **Go To** field and click the **Go To** button.
3. The Navigation buttons, **Home**, **Back**, and **Next** help you move forward or back though the help pages.
4. Select the mnemonic that you want to use.
5. Click **Finish** to paste the mnemonic into Advance.

If you chose an individual Datastream mnemonic, the series is displayed in the series display area. If you chose a group mnemonic, for example **GOLDS**, all series with mnemonics starting with **GOLDS** are displayed.
Selecting types of request

Advance gives you access to a wide range of reports, charts, summaries, overviews, and comparison requests.

Over 100 Datastream reports, charts, and data formats are stored in Advance’s database. You can access these by selecting a report/chart tab on the Request screen.

You can select request types:

**Overviews** - You can request Datastream company, commodity, warrant, trust, and bond performance overviews and a range of fixed format I/B/E/S forecast overviews.

**Charts** - You can request any of the standard Datastream graphics, including Line, Moving Average, Stochastics, High-Low-Close, Candlesticks, and Bollinger Bands.

**Reports** - You can select from a range of pre-formatted report types including Profit & Loss, Dividend & Earnings, Key Accounts Ratio, and Company Profiles.

**Data formats** - You can download time series, static, and company accounts data, which you can export or transfer to your spreadsheet.

**Summaries** - These are used for data requests for lists of series. For example, performance, geographical, and industrial summaries for a Datastream constituent list. Values for all constituents are displayed in one summary report, chart, or data format.

**Datastream Mnemonic search** – Two tools are available to search the Datastream database for company mnemonics. The searches can be for ‘live’ or ‘dead’ stocks.

**Comparisons** - You can request information on multiple series, enabling you to create comparisons across different data category types, and use flexible charts to create multiple chart requests. For example, you can compare an equity with an index such as the CAC40 and with an economic series such as the RPI.
Making your request

Once you have selected the criteria for your request and made your date, datatype, and currency adjustments, you can make your request:

RunNow: Request the report, chart, or data straight away.
This connects you to Datastream and displays the result. You can change the request criteria and click the button again, or save the request for future use.

You can right click this button to toggle it to update the existing request rather than creating a new one.

Add new request: Add the request to the open Project to refresh later.
This does not connect you to Datastream, but stores the request in the open Project. This enables you to work off line and send all your requests at a time of your choice.
See Using Projects, page 93
Refining your request

Dates

Each data category has a default date range. You can choose your own from four display period options:

- **Fixed start and end dates** - a fixed period, for example the whole of last year.
- **Relative start and end dates** - a fixed period relative to today's date.
- **Datastream base date** - a period starting with the date of the earliest data available on the database for a series.
- **Today** - a period ending with the latest available price or value. Intra-day prices are available for many markets. To receive the latest intra-day price or value, you must subscribe to the intra-day service.

Advance enables you to combine these start and end date options.

To select a date period:

1. Click the **Date** button.
   The **Configure Dates** dialog is displayed.
Select the date options:

- **Fixed** option
  To specify a fixed period in the past as the start of your display period. Use the spin buttons to select a date or type a date in the date field.
  - **Calendar** button (next to the **Fixed** display field) – to select a fixed (start or end) date from an interactive calendar.
  - **Show as Year** check box – to specify a yearly period, for example, if you are interested in viewing 5 year's worth of data. This converts the date into a whole year.

- **Relative** option
  To set a display period relative to a fixed end date, a relative end date, or 'today'. Use the spin buttons and pick list to select the relative period.
  - **Before Today** option - to specify both start and end periods before today
  - **After Today** option – to specify both start and end periods after today, for series that are projected into the future.
  - **Year Ends** – to request a number of year ends for company accounts reports and data.

- **Datastream Base Date** option
  To set the display date from the earliest data held

- **Today** option
  To request the latest (intraday) prices or values available on Datastream. To receive the latest intra-day price or value, you must subscribe to the intra-day service.

3 Click **OK**.

If the majority of your requests use a fixed display period, for example, the past 5 years, you can use the **Display Date Options** from the **Tools>Options** menu to display set display periods on the **Request** screen.

Click these options to select default relative display periods, relative to today’s latest available price.

They can be turned on/off via the **Tools>Options** menu. See *Advance Reference Guide, Advance Options, page 14*
Datatypes

The datatype defines the type of data. For example, the default datatype for equities is Price (Adjusted).

For some data categories and report/chart types, you can select the datatype. For example, for an Equity line chart request you can change from the default Price (Adjusted) datatype to Price - Opening.

Datatypes are grouped by their type and source. For example, Datastream time series, static, company accounts, I/B/E/S datatypes, MSCI datatypes, and Worldscope data items.

When the Datatype field is enabled, use Datastream Navigator to find and select the datatype you want, or if you know the exact mnemonic, you can use the Expert entry tab to select your datatype.

Using navigator

DataStream navigator enables you to search for the datatype you want by name or mnemonic, and by type and source. You can select datatypes from a number of data sources. For equities, you can choose from:

- Datastream time series and static datatypes
- Datastream account items
- I/B/E/S datatypes
- MSCI datatypes
- Worldscope data items

To select a datatype:

1. Click the Datatypes navigation button. The Datastream navigator is displayed.
2. Select name or mnemonic from the find drop down box.
3. Select starts with or contains from the that drop down box.
4. Select the type of datatype, static or time series from the type drop down box.
5. Select the source from the group drop down box.
6. Select a datatype from the list displayed. The datatype selected is displayed in the Series & Datatype Selected box.

Definitions

Click the Definition button to display the definitions help. Descriptions on the use and derivations of the data is available.
Currency

You can select which currency you want to display your results in.

Click the currency dropdown box and select a currency from the list displayed.

Note:
The parameters you can change are dependent upon the data category and chart, report or data format chosen. For example, you can change the date, data type and currency for an Equity - Line Chart request but only the date for a Constituent - Bar Chart request.
Using your results

All the reports, charts, and data formats you request from Datastream are displayed within Advance and are automatically added to the current open Project. You can also:

- **Print** your charts and selected pages of reports to any Windows printer.
- **Copy** reports, charts, and data formats to the Windows clipboard for pasting into Windows compatible applications.
- **Export** reports, charts, and data in a variety of formats for use with other applications such as word processors.
- **Transfer** data to Microsoft Excel. Data downloaded from Datastream can be transferred to your spreadsheet for regular updating.
- **Transfer** charts to Microsoft Office applications, Excel, Word, and PowerPoint. You can transfer your chart requests directly into these applications as embedded, dynamic objects. Once embedded, the requests can be refreshed within the applications.

Printing reports, chart and data

You can print any displayed report, chart, or data format to the default Windows printer.

**To print your report, chart, or data format:**

- Select **Print** from the **File** menu
  
  OR click the **Print Current Request** button to print the request displayed.

To change the printer or printer settings, select **Print Setup** for either Report or Chart from the **File** menu.

You can print requests after they have been refreshed with **Schedule Night Shift**. See **Scheduling Projects and Project Settings**, page 101 for details on how to do this. If you schedule a project to be refreshed and printed via Scheduled Night Shift, all requests in the Project are printed.
Copying reports, charts, and data

You can copy the displayed report, chart, or data format to the clipboard, and paste it into other Windows applications.

**Copying a report:**

1. Select the area of the currently displayed report to be copied; this can be:
   - A range of cells - click your left mouse button and drag the cursor over the display area to define the cell area to be copied.
   - The whole report (default) - the whole report is selected automatically when it is displayed.
2. Select **Copy** from the **Edit** menu.

---

**Note:**

*The report text will be held in the clipboard in text format with TAB formatting, but without font and text formatting.*

---

**Copying a chart:**

- Select **Copy** from the **Edit** menu.

---

**Note:**

*The chart will be held in the clipboard as a Windows Meta File.*

---

**Copying data:**

1. Select the area of the currently displayed data format to be copied, this can be:
   - A range of cells - click your left mouse button and drag the cursor over the displayed spreadsheet to define the cell area to be copied to the clipboard.
   - All the data (default) - the whole data request is selected automatically when it is displayed.
2. Select **Copy** from the **Edit** menu.

---

**Note:**

*The data selected will be held in the clipboard in text format with TAB delimiting for direct pasting into a spreadsheet or word processor.*
Transferring data to Excel

You can make data requests. Advance can retrieve data from the Datastream host using Datastream's dedicated API (DSAPI). This data can be transferred directly into Microsoft Excel. You can request:

- Time series data - downloaded values from a single series between two dates at a specified frequency. For several time series, use the Time series data option on the Comparison tab.
- Static data - downloaded values for a number of series at a particular date.
- Company accounts data - downloaded company accounts data for one or more companies at a specified frequency.

When you request one of these data requests, the data is displayed in the Advance display area in spreadsheet format.

To transfer data to Excel:

1. Select the Data for a single series tab.
2. Select Time series, Static, or Company accounts data.
3. Select the parameters for your data request.
4. Click Run Now.
   The results are displayed.
5. Select Transfer>Excel from the Tools menu or click the Transfer Result to Spreadsheet button.
   The Transfer Settings dialog is displayed.
6. Select the Transfer options:
   - Data from viewport – without creating a dynamic link OR
   - As refreshable object – transfer the data request as an embedded, dynamic object.
7. If Excel is open, you can transfer the data request to the current open sheet OR
   Advance can automatically open Excel creating a new sheet by default.
8. You can insert the data at a specific cell position by indicating the row and column position OR
   if you are already running Excel, you can insert the data at the current active cell.
9 Click OK.
The data is transferred to your Excel spreadsheet.

---

**Note:**
If you have chosen to transfer the data request as a refreshable object, the underlying reference codes for the data request are copied across to your spreadsheet as a link. You can refresh the data request in Excel at anytime by right-clicking on the mouse and selecting the **Refresh** option.

---

**Transferring requests to MS Office**

If you use Office 2000, you can use Advance for Office, AFO. You can transfer data requests into Excel, and charts into Excel, Word, and PowerPoint as refreshable objects.

You can refresh embedded requests in Excel, Word, and PowerPoint, without opening Advance, by right-clicking the mouse and choosing either **Refresh** or **Autorefresh**.

- **Refresh** - this enables you to refresh your requests on an ad hoc basis.
- **Autorefresh** - this enables you to refresh your requests every time you open your document, spreadsheet, or presentation.

See the *Advance for Office User Guides* for more details.

**To transfer a chart request to MS Office:**

1 Select the parameters for the request.
2 Run the chart or data request.
3 Select **Transfer to Excel, (Word, PowerPoint)** from the Tools menu, or from the right click menu.
   Excel (Word, PowerPoint) is opened with a new worksheet, (document, slide).
   Your chart is displayed.
4 You can display the chart:
   - as a single element
   **OR**
   - as an Office picture – select **Display as Office picture** from the right click menu.
     This gives you the Office **format picture** options.
To transfer multiple charts to Powerpoint

1. Go to the project screen
2. Using Ctrl/Shift + click to select the charts you require.
3. Right-click and select Transfer… then PowerPoint.

The charts will now be transferred to a new PowerPoint presentation.

To display the chart as transparent:

- De-select **Display original background** from the right click menu over the Refresh button.
Exporting charts, reports, and data

You can export the displayed report, chart, or data in a format suitable for use with other software packages. The data formats available for reports, charts and data are given below.

1. Select **Export** from the **Tools** menu. The **Export Viewport As** dialog is displayed.
2. Select the export details:
   - Type an export name.
   - A drive or server destination.
   - An export format

### Formats for Reports and Data

<table>
<thead>
<tr>
<th>Format</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>*.XLS</td>
<td>suitable for import to Excel 4.0 and Excel 5.0</td>
</tr>
<tr>
<td>*.PRN</td>
<td>undelimited text format</td>
</tr>
<tr>
<td>*.TXT</td>
<td>TAB separated format</td>
</tr>
<tr>
<td>*.CSV</td>
<td>comma separated format</td>
</tr>
<tr>
<td>*.HTM</td>
<td>HTML format for Internet and Intranet sites</td>
</tr>
</tbody>
</table>

### Formats for Charts

<table>
<thead>
<tr>
<th>Format</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>*.WMF</td>
<td>Windows Meta File format</td>
</tr>
<tr>
<td>*.CGM</td>
<td>Computer Graphics Metafile</td>
</tr>
<tr>
<td>*.EPS</td>
<td>Encapsulated Postscript</td>
</tr>
<tr>
<td>*.GIF</td>
<td>Graphics interchange file</td>
</tr>
<tr>
<td>*.PCX</td>
<td>Zsoft PC Paintbrush File</td>
</tr>
</tbody>
</table>

3. Click **OK**.

You can export requests after they have been refreshed with **Schedule Night Shift**. See *Scheduling Projects and Project Settings, page 101* for details on how to do this. If you schedule a project to be refreshed and exported via **Schedule Night Shift**, all requests in the Project will be exported in one go.
4 Click **OK**.
   The data is transferred to your Excel spreadsheet.

**Note:**

*If you have chosen to transfer the data request as a refreshable object, the underlying reference codes for the data request are copied across to your spreadsheet as a link. You can refresh the data request in Excel at anytime by right-clicking on the mouse and selecting the **Refresh** option.*
Using Local Lists

What are Local Lists?

Local Lists are a good to make report, chart, and data format requests for groups of series that you use frequently. Instead of making an individual requests, you can make one request to get results on all the series you are interested in. You can use the Request or Project screens to refresh your lists in Advance.

A Local List could be used to create a report on the series that make up a portfolio or the series that belong to a sector of interest. The following list contains 10 top equities by market value in Brazil:

<table>
<thead>
<tr>
<th>List Title</th>
<th>Individual series</th>
</tr>
</thead>
<tbody>
<tr>
<td>Brazilian Top Ten</td>
<td>Petrobras ON</td>
</tr>
<tr>
<td></td>
<td>Brasperola ON</td>
</tr>
<tr>
<td></td>
<td>Petrobas PN</td>
</tr>
<tr>
<td></td>
<td>Telebr RCTB RPN</td>
</tr>
<tr>
<td></td>
<td>Telemig PND</td>
</tr>
<tr>
<td></td>
<td>Electrobras ON</td>
</tr>
<tr>
<td></td>
<td>Telebr RCTB RON</td>
</tr>
<tr>
<td></td>
<td>Vale R Doce ON EJ</td>
</tr>
<tr>
<td></td>
<td>Ambev PN</td>
</tr>
<tr>
<td></td>
<td>Itubanco ON</td>
</tr>
</tbody>
</table>

All Local Lists have the same constituent parts:

- **List title** - this is the main list record, which is identified by its title
- **Individual series** - these are the individual series that make up the list

Local Lists, as the name suggests, are held locally on your PC. You decide what lists you need and what contents they should have.
Types of List

There are three types of list in Advance:

- **Local List** - this is a list created by you using Advance’s **List Wizard** and stored on your PC. These lists can be uploaded and stored on Datastream.

- **Datastream Constituent List** - this is an industry standard or Datastream market and sector constituent list held and maintained on Datastream. These lists can be downloaded from Datastream at any time using Advance’s **List Wizard**, and maintained locally.

- **User List (L# list)** - these are either, lists created using DSWindows or Local Lists that have been uploaded onto Datastream. These lists can be downloaded from Datastream at any time using Advance’s **List Wizard**, and maintained locally.

Types of List requests

Typically, when you create a Local List, the list will contain a series of one type, for example, a list of warrants or a list of commodities. You can issue a request for a Local List for any report, chart or data format, however, the type of series in your Local List determines which reports, charts, and data formats you can select from the report/chart tabs. For example:

<table>
<thead>
<tr>
<th>when you select...</th>
<th>you will get...</th>
</tr>
</thead>
<tbody>
<tr>
<td>Summaries</td>
<td>A consolidated output for all the series in the Local List</td>
</tr>
<tr>
<td>Overviews, Reports, Charts, Data, Comparisons</td>
<td>A separate report, chart or data format for each series in the Local List</td>
</tr>
</tbody>
</table>

Using local lists with flexible chart

You can make a flexible chart request using a list of series. This produces a chart for each series in the list. You can also produce multi-line charts. Add the list more than once, and select the multiple line per chart option. You can plot up to 8 series per chart, ie, add the list 8 times. See Making a flexible chart request for a list, page 80.
Making a Local List Request

Select Local Lists from the Category drop down box. Two windows are displayed:

To make a Local List request:

1. Select Local Lists from the Category drop down box.
2. Select a Local List from the list displayed.
3. Select All in the series window to include all series in the request, or select a single series.
4. Select the type of request, a report, chart, or data format.
5. Select the display period, datatype, and currency display, if appropriate.
6. Click Run Now.

Note:

You can use Sort from the right click menu to sort the list of local lists displayed by alphabet or by date.
Viewing a Local List

You can view the results of a Local List request on both the Request and Project screens.

To view a Local List request on the Request screen:
1. Use the **Browse bar** drop down list to view the individual elements that make up your Local List request, that is the list title and individual series requests. You can also use the move to next and previous request arrows to scroll through them.
2. Select the list title, or individual series to view the details of the request.

To view a Local List request on the Project screen:
1. Select the **Project** tab.
2. Check the **Keep List Together** box to list the series requests indented under the main list title.
3. Select the list title or individual series to view the request results.

On the Project screen, you can view all the Local List requests that belong to a Project.

Refreshing a Local List Request

You can refresh existing Local List requests on both the Request and Project screens.

To refresh a Local List request on the Request screen:
1. Select the request to refresh in the **Browse bar**.
2. Click **Run Now**.

To refresh a Local List request on the Project screen:
1. Select the **Project** tab.
2. Select the request to refresh, either, a whole list request, or an individual series request.
3. Double-click the button to the left of the selected request.
Deleting a Local List request

You can delete existing Local List requests on both the Request and Project screens.

To delete a Local List request on the Request screen:
1. Select the Local List request to delete.
2. Press the DELETE key.
OR
   select Delete from the right click menu.
3. You are prompted to confirm deletion.

To delete a Local List request on the Project screen:
1. Select the Project tab.
2. Select the Local List request to delete, either, a whole Local List request, or an individual series request.
3. Click the Delete Current Request button on the toolbar.

When you delete a list title, you are prompted to confirm that all series requests in the list are to be deleted as well.

Note:
The lists that are accessed from the Local Lists category and the lists that are viewed and refreshed from the Project screen are two separate entities. The lists under the Local Lists category are the actual lists from which requests are generated. The Project screen displays only the results of a list request.
The List Wizard

This wizard enables you to:

- Create a new list
- Edit an existing list
- Download a constituent list from Datastream
- Download a user list from Datastream
- Download a UCI list from Datastream
- Download Datastream bond list
- Merge Local Lists

Click the List Wizard button to display the List Wizard.
Creating a Local List

To create a Local List:

1. Select Local List from the Category drop down box.
2. Click the List Wizard button, or select List Wizard from the Tools menu. The List Wizard dialog is displayed.
3. Select Create a new list and click the Next button.
4. Select the data category from the Data Category drop down box.
5. Click the Series navigation button to use Datastream navigator to select your series, see Selecting a Series, page 3
   OR If you know the exact mnemonic, check the Expert entry check box, type the mnemonic and click the Add button.
To remove series from the list, select the series and click the **Remove** button.

Use the **Sort List** button to sort the list alphabetically OR the **Raise** and **Lower** buttons to move the selected item up and down in the list.

Click the **Next** button, when your list is complete.

Type the list name (XXX.LLT) and description in the fields displayed.

Select a save option:
- Save as local list. Saves the list on your local drive.
- Save as local list and **Upload** to datastream as a User list. Saves the list to the Datastream database, where it is stored as an L# list.
- Save as local list and **Upload** to datastream as a UCI list. Saves the list to the Datastream database as a user created index list, where it is stored as an X# list.

Click the **Finish** button.

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

---

**Note:**

You can also create an index list from a local list in the List Wizard. When you have created or edited a local list, you can select the option to save it as a local list and upload it to Datastream as an index list.
Editing a Local List

To edit a Local List:

1. Select Local List from the Category drop down list.
2. Select the list you want to edit from the lists displayed.
3. Click the List Wizard button, or select List Wizard from the Tools menu. The List Wizard dialog is displayed.
4. Select Edit an existing list and click the Next button.
5. To add series to the list, click the Series Navigator button to use Datastream Navigator to select your series, see Selecting a Series, page 3 OR
   If you know the exact mnemonic, check the Expert Entry check box, type the mnemonic and click the Add button.
6. To remove series from the list, select the series and click the Remove button.
7. Use the Sort List button to sort the list alphabetically OR the Raise and Lower buttons to move the selected item up and down in the list.
8. When you have finished your editing, click the Next button.
9. Edit the list name (XXX.LLT) and description, if required.
10. Select a save option:
    - Save as local list. Saves the list on your local drive.
    - Save as local list and Upload to datastore as a User list. Saves the list to the Datastream database, where it is stored as an L# list.
    - Save as local list and Upload to datastore as a UCI list. Saves the list to the Datastream database as a user created index list, where it is stored as an X# list.
11. Click the Finish button.

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

If a Local List is edited in Advance and the Upload button is selected in the lists wizard, the same L# list number is used, overwriting the original list. Similarly, in Equity Search where a list is generated from a search request, uploaded and then refined, a subsequent upload to Datastream will use the same L# number. The L# number is also displayed on the status bar. Local lists with series from several data categories, for example, Equities and Unit Trusts, can now be created in the list wizard.
Getting names from a local list of codes created in AFO

You can create a list from a code list in AFO excel and save it as a local list. You can then open this list in Advance and get the names for the codes. For example a list of ISIN codes.

To get names:

1. Select local lists from the Category drop down box.
2. Select the list containing codes from the list displayed.
3. Select Get Names from the right click menu.
4. The names are displayed against the codes.
Downloading Datastream Constituent Lists

You can use the List Wizard to download Datastream and industry standard constituent lists. Datastream includes over 3,500 constituent lists, which include market and sector constituents, for all leading markets.

To download constituent lists:
1. Select Local List from the Category drop down box.
2. Click the List Wizard button, or select List Wizard from the Tools menu. The List Wizard dialog is displayed.
3. Select Download a constituent list and click the Next button.
4. Click the Series Navigator button to use Datastream Navigator to select your series, see Selecting a Series, page 3 OR
   If you know the exact mnemonic, check the Expert Entry check box, type the mnemonic and click the Add button.
5. Select the list you want to download, and click the Next button.
6. Click the Finish button to download the selected list.

Downloading User Created Lists

To download a user created list:
1. Select Local List from the Category drop down box.
2. Click the List Wizard button, or select List Wizard from the Tools menu. The List Wizard dialog is displayed.
3. Select Download a user created list and click the Next button.
   The lists stored on Datastream are displayed.
4. Select the list you want to download.
5. Click the Next button.
6. Click the Finish button to download the selected list.

Advance lets you download user created lists from Datastream for storage and use with Advance. These lists include lists created with DS Windows programs or lists created by you with Advance that have been uploaded onto Datastream.

The list will be available immediately from the Local Lists tab for all your report, chart, and data format requests.

Note:

Downloaded lists are a one-off copy of the list held on Datastream. They are not updated when you change the list on Datastream.
Downloading User Created Index lists

To download a user created index list:

1. Select Local List from the Category drop down box.
2. Click the List Wizard button, or select List Wizard from the Tools menu.
   The List Wizard dialog is displayed.
3. Select Download a user created index list and click the Next button.
   The lists stored on Datastream are displayed.
4. Select the list you want to download.
5. Click the Next button.
6. Click the Finish button to download the selected list.

Advance lets you download user created index lists from Datastream for storage and use with Advance. These lists include lists created with DS Windows programs or lists created by you with Advance that have been uploaded onto Datastream.

The list will be available immediately from the Local Lists tab for all your report, chart, and data format requests.

See Using indices, page 35.

---

**Note:**

Downloaded lists are a one-off copy of the list held on Datastream. They are not updated when you change the list on Datastream.

---

Downloading Datastream Bond Lists

To download a bond list:

1. Select Local List from the Category drop down box.
2. Click the List Wizard button, or select Lists Wizard from the Tools menu.
   The List Wizard dialog is displayed.
3. Select Download a Datastream bond list and click the Next button.
   Options are displayed.
4. Use the options to create the bond list you want to download.
5. Click the Next button.
6. Type a description and list name in the Description and Name fields, if the defaults are not suitable.
7. Click the Finish button to download the selected list.
Advance lets you download bond lists from Datastream for storage and use with Advance. The list will be available immediately from the Local Lists tab for all your report, chart, and data format requests.

**Merging two or more lists into a single list**

You can merge two or more lists to form a new list.

**To merge lists:**

1. Select **Local List** from the **Category** drop down box.
2. Select **List Wizard** from the **Tools** menu.
   - The **List Wizard** dialog is displayed.
3. Select **Merge Local Lists** and click the **Next** button.
   - The **Merge Local Lists** dialog is displayed.
4. Select the data category from the **Category** drop down box.
5. Select the lists you want to merge and click the **right arrow** button.
   - To select more than one list, hold down the **crtl** key and select the lists you want.
6. Type the description and name of the new list in the **Description** and **Name** fields.
7. Click the **Merge Lists** button.
User created indices

The UCI Manager enables you to create and maintain your own indices. Each index is based on a list of constituent data series, which you specify as the first step of the index creation process. Once created, the index can be automatically maintained for you, with new values calculated on a daily basis. User created indices are valuable additions to your suite of research and analysis tools, enabling you to track the performance of your own stocks and portfolios, and measure performance against established market indices and other benchmarks.

You can:
- Create index lists, X#ABC lists.
- Calculate indices, X%ABC lists.

You can create lists by selecting individual constituents, or using existing lists.

Create New List.

View Usage Report.

Modify Index button.

Click to edit, calculate, or delete your list.

Search for index list.

Lists and indices available.

Modify Index button.

Master List.
Displays all index lists and indices.

Lists and indices available.

Master List.
Displays all index lists and indices.

Create New List.

View Usage Report.

 Modify Index button. Click to edit, calculate, or delete your list.
Trial and Auto indices

**Trial indices** – A trial index is an experimental or one off calculation. This is usually calculated within an hour. A trial index is not updated by Datastream.

**Auto indices** – An auto index is calculated automatically, by Datastream, every 24 hours. This is calculated the day following its request and then every 24 hours.

Auto Halt indices

Indices are not deleted from the system. Please delete unused indices to minimise unnecessary calculations. If an index has not been used for 3 months, it is given Auto Halt status.

To reinstate the auto calculation of an index with this status, see Reactivating an Auto Halt index, page 41.

Using indices created in DS Windows

If you are using indices created in DS Windows that include history and weighting (other than default), you can calculate the index in Advance, but you can not modify the list. These indices are marked with an asterisk after the list size.
Creating an index list

To create an index list

1. Select **UCI Manager** from the **Tools** menu. The **UCI Manager** is displayed.
2. Select **Create new list**. The **List editor** is displayed.

3. Type the list mnemonic, this must begin with a letter and can be up to 6 characters long.
4. Type a description for the list.
5. Select the constituents for your list.
   - Click the **Series navigation** button to search for and select individual equities, index lists, or constituent lists from Datastream navigator.
   - OR
   - Click the **List picker** button to select a local or user list.
6. When you have selected your constituents, close navigator to return to the List editor.
7 You can use the Remove, Clear selection, and Invert selection buttons to amend your list.

8 Click Save when you have selected the constituents for your list.

You can now calculate, view, edit, or delete your list.
If your list is unsuccessful you are given the option to correct errors.

---

**Note:**

You can also create an index list from a local list in the List Wizard. When you have created or edited a local list, you can select the option to save it as a local list and upload it to Datastream as an index list.
Calculating an index

To calculate an index, you must have created an index list. See Creating an index list, page 37.

To calculate an index

1. Select UCI Manager from the Tools menu.
2. Find the index list you want to calculate and click the Modify index button.
3. Click the Request calculation button.
4. Type or select the base date.
   This is the date for the starting value of the index. If data is not available from the
   selected base date, the earliest date for which data is available is used.
5. Select the end date (optional), for trial indices. For automatic indices, calculations
   are made to the latest date for which data is available.
6. Select the calculation type, Trial or Auto, from the Calculation type drop down box.
7. Select the currency for the index from the Currency drop down box.
8 Click the **Submit request** button. Your index is sent for calculation.

---

**Note:**

*Your index will show Status: PEND in the UCI Manager until it has been calculated. You must refresh the screen to see if the status has changed. When it has been calculated, you can click View Status Report on the details screen, which gives you a report of the calculation results.*

---

**Viewing an index**

**To view an index:**

1. Find the index you want to view and click the index mnemonic to select it. The index selected is displayed in the Series display area.
2. Select the type of chart/report you want to view the index with.

You can also find your index using the Datastream Navigator:

1. Select **User Created Indices** from the **Category** drop down box.
2. Find the index you want to view, and click the index mnemonic to select it. The index selected is displayed in the Series display area.
3. Continue from step 2 above.

---

**Editing an index**

**To edit an index:**

1. Select **UCI Manager** from the **Tools** menu.
2. Find the index list you want to edit and click the **Modify Index** button.
3. Click the **Show/Edit** constituents button. The **List Editor** is displayed.
4. Click the **Series navigation** button to display **Datastream navigator** to select and add more constituents
   OR
   Click the **List Picker** button to select and add a list.
5. Use the **Remove, Clear Selection**, and **Invert Selection** buttons to amend the constituents in your list.
6. Click the **Save** button to save your changes.

You can also find your index using the Datastream Navigator:
1 Select **User Created Indices** from the **Category** drop down box.
2 Find the index you want to edit.
3 Click the **Modify Index** button.
   The **UCI Manager** is displayed.
4 Continue from step 3 above.

**Deleting an index or index list**

**To delete an index or index list**

1 Select **UCI Manager** from the **Tools** menu.
2 Find the index or index list you want to delete and click the **Modify index** button.
3 Click the **Delete list/index** button.
   A confirmation dialog is displayed.
4 Click **Yes** to delete your list/index

You can also find your index using the Datastream Navigator:

1 Select **User Created Indices** from the **Category** drop down box.
2 Find the index you want to edit.
3 Click the **Modify Index** button
   The **UCI Manager** is displayed.
4 Continue from step 3 above.

**Recalculating an auto index**

1 Select **UCI Manager** from the **Tools** menu.
2 Find the auto index you want to calculate and click the **Modify index** button.
   The **Details** screen is displayed.
3 Click the **Request Calculation** button.
   The **Calculation Request** screen is displayed.
4 You can change the base date, if you want to.
5 Click the **Submit Request** button.

The index status will be Auto Pend.

**Reactivating an auto halt index**

1 Select **UCI Manager** from the **Tools** menu.
2  Find the auto halt index you want to reactivate and click the **Modify index** button. The **Details** screen is displayed.

3  Click the **Request Calculation** button. The **Calculation Request** screen is displayed.

4  Click the **Submit Request** button.

The index status will be **Auto Pend**.

**Index Status**

<table>
<thead>
<tr>
<th>Status</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Trial</td>
<td>Trial index</td>
</tr>
<tr>
<td>Trial Pend</td>
<td>Trial index pending calculation</td>
</tr>
<tr>
<td>Trial Error</td>
<td>Trial index error in calculation</td>
</tr>
<tr>
<td>Auto</td>
<td>Auto index</td>
</tr>
<tr>
<td>Auto Pend</td>
<td>Auto index pending calculation</td>
</tr>
<tr>
<td>Auto Error</td>
<td>Auto index error in calculation</td>
</tr>
<tr>
<td>Auto New</td>
<td>Auto index new</td>
</tr>
<tr>
<td>Auto Halt</td>
<td>Auto index halted due to inactivity for 3 months</td>
</tr>
</tbody>
</table>
User created time series

A user time series is a series of values (data) for different points in time created by you and uploaded for storage on Datastream. The values can be daily, weekly, monthly, quarterly, or yearly and you can save the series in management groups to help you organise them. You can use these series in Advance and AFO charts and reports. You can combine them with Datastream maintained series and use functions and expressions to manipulate them. An Excel template is used to create and edit your time series. You can download an existing series to form the basis of a new one.

The user created time series template:

Name  The series name (up to 64 characters).
Code  The series code. Use this to retrieve your series in Advance and AFO. This must start with TS followed by 6 characters, eg TSUKRPI1.
Mgmt. Group  Management group. 1 - 10 characters. You can have up to 200 series in a group, eg UK.
Decimals  The number of decimal places for your values.
As %  
No indicates the series are actual values. Yes indicates the series are expressed as percentages.

Freq. Conv.  
Determines the adjustment to make when you use a series at a lower frequency than it is stored. For example, using series stored with daily values in a request for weekly values.
- Sum - Sum all values for a calendar period.
- Avg - Average all values for a calendar period.
- End - The value at the end of a calendar period.
- Act - The actual value at the calendar intervals.

Date align.  
For data adjusted for frequency, select where in the calendar period to align the data for plotting.
- 1st - Plot data from the beginning of the calendar period.
- Mid - Plot data from the middle of the calendar period.
- End - Plot data from the end of the calendar period.

Carry ind.  
For null values. You can leave the values blank or carry forward the previous value.
- Yes - carries the previous value.
- No - leaves the value at null.

Upload type  
When editing a series, you can upload only the values that have changed.
- Full - uploads all the values in the series.
- Partial - uploads the values that have changed.

Set date range  
This is used to set the start and end dates, and the frequency for new series. Use this to change the end date when extending the series.

Optional:

Units  
A qualifying unit for your data. For example: tons, US$ millions, index.

Currency  
Select a currency for series with monetary values.

Other fields:

Start date  
The start date for the series data.

End date  
The end date for the series data. Note, you can change this for Partial uploads - only data after the end date is uploaded.

Frequency  
The frequency of values: daily, weekly, monthly, quarterly, or yearly.
Creating a user created time series

To create a time series:

1. Select **New UCTS table** from the **AFO>User created time series** menu and save the workbook.
2. Type a **name** for the series.
3. Type the **series code**. This must start with TS followed by 6 characters, eg TSUKRP1.
4. Type the **management group** you want the series to belong to (up to 10 characters) eg UK.
5. Select the **number of decimal places** for display. Type the number, or select from the drop down box and click the **Add** button.
6. Type the units, (optional). This is a qualifying unit for your data. For example: tons, US$ millions, index.
7. Select **As %**. **No** indicates the values are actual values. **Yes** indicates the values are expressed as percentage. Used in the Latest Values and % change over 3 periods report.
8. Select the type of **Frequency conversion**. This determines how the series is handled if you use it a lower frequency than it is stored.
9. Select the **Date alignment** for data adjusted for frequency.
10. Select a **Currency** for monetary values (optional).
11. Select the **Upload type**. Select **Full** to upload all the values. Use Partial to upload only the values that have changed when editing a series.
12. Set the date range. Click the **Date range** button and type the start and end dates. Select the frequency of the data: Daily, weekly, monthly, quarterly, or yearly. The dates are displayed in the date range column, ready for values to be added.
13. Type your values against the dates displayed.
14. Click the **Upload** button to save your series. Note the cursor must be in the **Code** field to upload the series. You can highlight more than one series to upload several series at the same time.

You can now use this series in Advance or AFO requests.
Editing an existing user created time series

To edit a user created time series:

1. Select **New UCTS table** from the **AFO>User created time series** menu and save the workbook.
2. Click the **Select code** button. Note the cursor must be in the **Code** field.
   Datastream navigator is displayed with the series set up on your Datastream ID.
3. Search for and select the series you want to edit.
   The selected series mnemonic is displayed in the **Code** field.
4. Click the **Download** button. Note the cursor must be in the **Code** field.
5. If you want to add new values, click the **Set date range** button and type a new end date.
6. Make your changes and select the **Upload** type.
   Use **Full** upload to overwrite all existing values.
   Use **Partial** upload to update only the new values and change the date in the **End date** field to indicate the new values to upload.
   Note: see tick box in Options dialog.
7. Click the **Upload** button to save the series. Note the cursor must be in the **Code** field.

To delete a time series:

1. Place the cursor in the **Code** field of the series you want to delete.
2. Click the **Delete** button to delete the series.

To add a new worksheet to the workbook:

If you want to download or upload a series with an earlier start date or a different frequency, add a new worksheet.

1. Click the **New sheet** button.
   A new worksheet is displayed.

To configure the template:

1. Click the **Options** button.
   The **Options** dialog is displayed.
2. Tick the **Overwrite all values if series already exists** box to overwrite existing values.

---

**Note**

*The server for Navigator is configured via the **AFO>Options** menu.*
Using expressions and functions

About expressions and functions

Advance gives you access to Datastream’s standard expressions and functions, which you can use to form part of your chart, report or data requests. An expression is an individual Datastream code or series combined with datatypes and/or functions to create a mathematical formula.

Expressions

For example, to find a share price and display it as a percentage of a price index:

\[ \text{J:TYMO/AUTOSJP} \times 100 \]  
the Toyota share price (J:TYMO) is expressed as a percentage of the Japanese motor industry price index (AUTOSJP).

Expressions are a powerful and flexible way of retrieving data from Datastream with variables and functions that you can choose to suit your needs. There are two forms; standard and symbolic:

<table>
<thead>
<tr>
<th>Expression</th>
<th>Example</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Standard</td>
<td>FTALLSH/UKRP....F</td>
<td>This requests the FTA All share index with the inflationary element (RPI) removed.</td>
</tr>
<tr>
<td>Symbolic</td>
<td>X(DY)/Y*100</td>
<td>This requests the dividend yield of variable ( X ) expressed as a percentage of variable ( Y ), where ( X ) is an equity series and ( Y ) is a market index.</td>
</tr>
</tbody>
</table>

Functions

Expressions can also contain Datastream functions, which enable you to manipulate Datastream data. A typical function, for example the Moving Average, has a mnemonic followed by parameters in brackets:

\[ \text{MAV#(BP,3M)} \]  
this calculates a three month moving average for BP.

You can access a whole range of functions that you can build into your own customised expressions. For example, this symbolic expression has the function Percentage Change (PCH#) nested into the expression:

\[ \text{(PCH#(X(EPS)),Y)} \]  
this calculates the earnings growth for an entered series \( X \) over an entered time period \( Y \).
To use an expression in a request:

2. Select a chart or data format.

Expression selection and prompts for variables are displayed below the Chart/Report list on the Comparison tab. Each relevant entry is prefixed with `fx`.

When you request a chart or data format with an expression, the result is displayed in the same way as for other requests, except that the expression is displayed in the legend.
Using the Expression Picker

Use the Expression Picker to select expressions. Click the Expression Picker button, to display the Expression Picker dialog.

See also Selecting an Expression, page 50

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.

You cannot edit a Datastream global expression, but you can use it as a starting point for making a new local expression.
Selecting an Expression

Use the Expression Picker to select Datastream global expressions, and your own created expressions. The Expression Picker button is displayed when you select the Comparison tab, and on the Flexible Report settings dialog.

All expressions have a unique number, for easy recognition. Global expressions take the form xxxE and local expressions Exxx.

To select an expression:
1. Select the Comparison tab.
2. Click the Expression Picker button. The Expression Picker dialog is displayed.
3. Use the Show: drop down box to display: all, local, or global expressions.
4. Select the expression want from the list displayed.
   You can use Find: to search the list by Title or Expression.
5. Click OK to add the expression to the Comparison list.
   You can add the required series and select a report, chart, or data format.
Using the Expression Builder

Use the Expression Builder to create and edit your own expressions. You can select the individual components that make up your expressions. Click the **Expression Builder** button to display the **Expression Builder** dialog.

The Expression builder

The expression formula is displayed in the Expression field. You can type the formula in the Expression field and press ENTER to expand the expression in the work area for editing.

- **Expression Title**: Type the expression title, which is displayed in the Expression Picker for selection.
- **Expression**: You can save your expression to a number, for example Exxx.
- **Expression Builder** tool buttons:
  - Use the tool buttons to enter the individual elements (e.g., series, datatypes, numbers) that make up your expression.
  - A description of each line element is shown.
  - The work area where you build your expression. Each element of the expression is shown as an individual line, which you can edit.
  - The 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.
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

The **Series Selection** dialog 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 maths 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 maths 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.

Expression Builder Menus

Expression menu
- **Open** - opens the Expression Picker so you can select an existing expression for use within the Expression Builder.
- **New** - clears the Expression Builder workspace, leaving you with a blank space to create a new expression.
- **Save** - saves the expression displayed in the workspace area.
- **Close** - quits the Expression Builder.

Edit menu
- **Undo** - undoes your last create, delete, or edit action.
- **Delete** - deletes whole functions or expressions that are nested.
Tools menu

**Function** - The Function selection 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.

**Expression** - The Expression Picker dialog is displayed. Select a Datastream global expression or a local expression to add to your new expression. For example, if you want to nest one expression in another.

**Series** - The Series Selection dialog 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 maths 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.

**Date** - Edit the start and end dates for a selected function. The workspace 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 maths operators to your expression. Position the workspace cursor at the insertion point and click an operator button.
Creating a Standard Expression

A standard expression contains series in a ‘static’ form, that is the series you select for the expression will be used each time you issue the expression request. For example, the Glaxo Wellcome stock and the FTSE All Share will be used each time you select this standard expression:

\[ GLXO(PE)/FTALLSH(PE)*100 \]

Standard expressions vary in their use and complexity. The following procedure shows you how to create the above expression, which calculates the price earnings ratio relative to the FTSE all share index.

To create a standard expression:
1. Select the Comparison tab on the Request screen.
2. Click the Expression Builder button. The Expression Builder dialog is displayed.
   - Select a series:
3. Click the Series button.
4. Un-check the Use as Symbolic check box, to use the series you select in a 'static' form.
5. Select Equity from the Series dropdown list.
6. Search for the Glaxo Wellcome equity series and select it.
7. Click OK. A warning message is displayed asking you to confirm your choice. Click Yes to confirm.
   - Select a datatype:
8. Click the Datatype button. The Datatype navigator is displayed.
9. Search for and select the Price Earnings datatype.
10. Click the Maths Operator button and select the / sign for division.
Select a series:
11 Click the Series button
12 Un-check the Use as Symbolic check box, to use the series in its static form.
13 Select Index from the Series dropdown list.
14 Search for the FT All Share indices series and select it.
15 Click OK.
   A warning message is displayed asking you to confirm your choice. Click Yes to confirm.

Select a datatype:
16 Click the Datatype button.
   The Datatype navigator is displayed.
17 Search for and select the Price Earnings Ratio datatype.

Add the math operator for Multiplication:
18 Click the Maths Operator button and select the * sign for multiplication.
19 Click the Add Number button, type 100, and click OK.
20 Click OK to save your completed expression.

If your expression is complete, logical, and contains no errors, Advance uploads the expression onto Datastream and assigns the expression a unique code. The expression is now copied to the comparison request window where you can make your comparison request.
Creating a Symbolic Expression

A symbolic expression contains symbols, for example X and Y, instead of actual series. You supply the details for the symbol each time you use the expression. You can only substitute series for the symbols in a symbolic expression, and not datatypes or time periods.

In the following example, X and Y are two equities, with the dividend yield of X expressed as a percentage of the dividend yield of Y.

\[ \frac{X(DY)}{Y(DY)} \times 100 \]

When you initially create this expression, you must specify a series for both X and Y, so that Datastream can check the logic of the expression before assigning it a unique number. Once the expression has been checked and saved, you specify the series of your choice for X and Y each time you issue a request.

Symbolic expressions vary in their use and complexity. The following procedure shows you how to create the above example. If you wish to create a symbolic expression using Datastream functions, refer to Datastream Definitions on the Advance Help menu for descriptions of the Functions available.

To create a symbolic expression:

1. Select the Comparison tab on the Request screen.
2. Click the Expression Builder button. The Expression Builder dialog is displayed.
   
   Select a series:
3. Click the Series button. Ensure that the Use as Symbolic check box is checked.
4. Select Equity from the Series dropdown list.
5. Select an equity series.
6. Click OK.
   
   Select a datatype:
7. Click the Datatype navigation button. The Datatype navigator is displayed.
8. Search for and select the Dividend Yield datatype.
9. Add the math operator for division:
   Click the Maths Operator button and select the / sign for division.
Select a series:
10 Click the **Series** button. Ensure that the **Use as Symbolic** check box is checked.
11 Select **Equity** from the **Series** dropdown list.
12 Select an equity series.
13 Click **OK**.

Select a datatype:
14 Click the **Datatype navigation** button.
The **Datatype navigator** is displayed.
15 Search for and select the Dividend Yield datatype.

Add the math operator for multiplication:
16 Click the **Math Operator** button and select the * sign for multiplication.
17 Click the **Add Number** button, type 100, and click **OK**.
18 Click **OK** to save your completed expression.

If your expression is complete, logical, and contains no errors, Advance uploads the expression onto Datastream and assigns the expression a unique code. The expression is now copied to the comparison request window where you can select new series for the symbolic elements of the expression and make your comparison request.
Editing an Expression

You can edit a ‘local’ expression, an expression created by you or by users in your group. If you do edit an expression that is used in a shared network environment, the expression is changed for other group users as well as for you.

- Change series
  You can change a static series for another series by simply selecting the series in the Expression Builder workspace, clicking the Series button and selecting and applying another static or symbolic series.
  You can delete a series, care must be taken as the delete function will delete whole functions or expressions that are nested.

- Change numbers
  You can change a number to a higher or lower value by double clicking the number in the workspace and entering a new value in the Enter a Number dialog.

- Change maths operators
  You can change maths operators. Double-click the operator in the workspace and then select a different operator from the pop-up button bar. You can either replace the operator with the new sign or insert the new sign so that it is appended to the end of the current block.

- Change datatypes
  You can change datatypes by double-clicking on the datatype in the workspace. The Datatypes Navigator is displayed. Search and select a new datatype.

- Change date range of Function
  You can change the default date range by double clicking the time period and selecting a new period or date range.

- Change currency of series
  To change the displayed currency, select the series in the workspace and click on the Currency button. Choose a currency from the displayed dropdown list and click OK.
Customising your charts and reports

You can customise your reports and charts to suit your needs. You can change the style, colour and thickness of any or all default line settings for your charts, and adjust the default background colour, grid, and fill styles.

You can add additional lines, shapes, text, and fills using **Annotations** to bring an extra dimension to your hard copy. Text for both charts and reports can also be changed to any default typeface, point size and style. For example, you can:

- Adjust the report heading (e.g., **Helvetica**, 12pt, bold) to give all your reports a prominent and consistent heading style.
- Change the column headings to a different font (e.g., **Times Roman**).
- Change the body text to a clean (e.g., **Helvetica**, 10pt, normal) and readable style.
- Add new text to the chart using **Annotations** and emphasise it using a shaded box or an ellipse. You can also move any default text around and change its style.
- Adjust the background colour, grid or block fills to any desired colour or fill style.
- Change the line styles to different thicknesses and colours, for visual recognition on screen and on paper.
Overview of Properties and Annotations

You can customize the appearance of your charts and reports using Annotations and Properties from the Tools menu.

Annotations

Select Display Annotation Toolbar from the Tools menu, or right click over the display area, or click the Annotations button on the main toolbar.

Use the Annotations tool bar to add additional text, lines, arrows, shapes and fills to individual charts. You can specify a colour for any of these attributes.

Templates

When you annotate your charts, the style can be saved in a template. The template can be used with other charts without affecting the default styles set up in Properties. For example, you could create a company logo using Annotations and save it in a template for use with every chart you produce.

When you have saved your annotations in a template and have loaded the template with the current request, the annotations can be turned on and off by selecting Show Annotations from the View menu.

See Using Annotations, page 66.

Properties

Select Properties from the Tools menu, or right click over the display area.

Use Properties to change the default styles of text, lines, arrows, shapes and fills for ALL your charts, reports, and data requests. When you change the styles using Properties, all subsequent chart, report or data requests use the new styles. This is useful if you want to produce a range of charts, reports and data with a common style.

Each style can be applied to a named attribute; for example, Report Title for reports, First Line for charts.

Using Properties

You can change the default appearance of all your chart, report, and data requests using the Tools>Properties menu. Each request type has its own settings screen. For example, if you select Properties while a chart is displayed, the Default Chart Properties screen is displayed. The changes you make on the chart properties dialog will affect all charts, similarly for reports and data requests. You can save these style schemes for reuse or to share with other users, for example a common house style.

You can:
- Change the line styles for charts
- Change the fill styles for charts
- Change the text styles for charts
- Change the text styles for reports
- Change the text styles for data requests
- Save style schemes
- Export and import style schemes

Saving style schemes

You can save the styles you select in properties and apply them to projects scheduled in the night shift facility.

To save a new style scheme:

1 Select Properties from the Tools menu. The Default chart properties dialog is displayed.
2 Click the Save As... button. The Save Scheme as dialog is displayed.
3 Select the Create New Scheme option.
4 Select Local or Shared from the drop down box. If a shared folder is not displayed, add a file location for shared chart style scheme in the Tools>Options>File locations dialog.
5 Type the name of your style scheme and click OK to save the styles set.

To overwrite existing style schemes:

1 Click the Save As... button. The Save Scheme as dialog is displayed.
2 Select the Overwrite Existing Scheme option.
3 Select the scheme you want to overwrite from the drop down list.
4 Click OK to save the new style.
To export a style scheme:
1 Select Properties from the Tools menu. The Default chart properties dialog is displayed.
2 Click the Save As… button. The Save Scheme as dialog is displayed.
3 Select the Export to Scheme File option.
4 Click the Browse button.
5 Select the directory to save the scheme in.
6 Type the file name.
7 Click the Save button.

To import a style scheme:
1 Select Properties from the Tools menu. The Default chart properties dialog is displayed.
2 Click the Scheme drop down box.
3 Select Read Style Scheme File from the list displayed.
4 Select the file name.
5 Click the Open button.
6 Click OK.

Changing the line styles for charts

To apply different line styles:
1 With a chart displayed in the results screen, select Properties from the Tools menu. The Default Chart Properties dialog is displayed.
2 Select the Chart Line Styles tab.
3 Select the following line attributes for the required line type (e.g. upward trend):
   • Style - click on a style button.
   • Colour - click on a colour button. More colours are available by clicking the More... button.
   • Thickness - move the scroll bar to increase/decrease the line thickness.
4 Click OK.

Note:
Intermediate grid lines in flexible charts use the properties set for line eight.
Changing the fill styles for charts

To apply different background colour and patterns to your charts:

1. With a chart displayed in the results screen, select Properties from the Tools menu. The Default Chart Properties dialog is displayed.
2. Select the Fill Styles tab.
3. Select the fill you want to change (e.g. Screen, first fill, etc).
4. Click the fill drop down box and select:
   - Colour - click on a colour button. More colours are available by clicking the More... button.
   - Fill effects - select pattern or gradient, select your style and colours, and click OK.
5. Click OK.

Changing the text styles for charts

To change the text styles for charts:

1. With a chart displayed in the results screen, select Properties from the Tools menu. The Default Chart Properties dialog is displayed.
2. Click the Chart Text Styles tab.
3. Select the following text attributes for the required text type (e.g. Title):
   - Font
     - click on the Change... button
     - select a Font (e.g. Times New Roman)
     - select a Font style (e.g. bold, italic, etc.)
     - select a point size or scale
     - click OK
   - Text colour
     - click on a colour button. More colours are available by clicking the More... button.
4. Click OK.

Note:

*For changing the point size of chart text styles, you can use the Font Scaled dropdown list to determine the correct scaling (e.g. small, medium, large).*
Changing the text styles for reports

To change the text style for reports:

1. With a report displayed in the results screen, select Properties from the Tools menu. The Report Properties screen is displayed.

2. Select the following text attributes for the required text type (e.g. Report Title):
   - **Font details**
     - click on the Change... button,
     - select a Font (e.g. Times New Roman)
     - select a Font Style (e.g. bold, italic, etc.)
     - select a Point Size
     - click OK
   - **Text colour**
     - click on a colour button

3. Click OK.

4. Select the grid display options, if required:
   - click the Show Grid Lines check box to break up the report into spreadsheet type cells or grids
   - click the Show Grid Row Headers check box to display row heading references (1, 2, 3 and so on), if you are using Show Grid Lines
   - click the Show Grid Column Headers check box to display column heading references (A, B, C and so on), if you are using Show Grid Lines

5. Click OK.

Changing the text styles for data requests

To change the size, style, and colour of the text in your data channel request, for example the text displayed in your Time Series Data, Static Data, and Company Accounts Data requests:

1. With a data request displayed in the results screen, select Properties from the Tools menu. The Data Channel Properties screen is displayed:

2. Select the following text attributes for the required text type (i.e. Data Channel):
   - **Font details**
     - click on the Change... button
     - select a Font (e.g. Times New Roman)
     - select a Font Style (e.g. bold, italic, etc.)
     - select a Point Size
     - click OK
   - **Text colour**
     - click on a colour button

3. Click OK.
Using Annotations

The Annotations toolbar is available when a chart is displayed in the results screen. Select Display Annotations Toolbar from the Tools menu.

**Template**

Open an existing template. The Load Template dialog is displayed. Templates have the file extension *.MDB. When you load a template, annotations are displayed over your chart or report.

**Save Template**

Save the annotations on your chart as a template. The Save Template dialog is displayed. The template must be saved with the file extension *.MDB.

**Text**

**Text button**

Type text annotations on your chart. Click the Text button, then click where you want to put your text. Drag the cursor downward to increase the point size. Type your text and press ENTER. When you select this text, you can use Font and Font Size from the Text Tool Bar to change the text style.

**Text Colour**

Select the default font colour. Click the Font Colour button and select the colour you want from the drop down palette.

**Show Text Tool Bar**

Display or hide the Text Tool Bar.

**Drawing Objects**

**Select Objects**

Select text or graphic objects.
Line
Draw a line; click where you want to start, drag to where you want to finish, and release

Arrow
Draw a line with arrow ends

Rectangle
Draw a rectangle; click where you want to start and drag to size. To draw a square, hold down SHIFT and drag.

Oval
Draw an Oval; click where you want to start and drag to size. To draw a circle, hold down SHIFT and drag.

Free Rotate
Rotate a selected object. Select the object, click Free Rotate and drag a corner to rotate the object.

Fill and Line Styles

Fill Colour and Fill Effects
Add, modify, or remove the fill colour or fill effect from the selected object. See Fill Effects, page 69.

Line Colour
Add, modify, or remove the line color from the selected object.

Text Colour
Change the colour of the selected text.
Line width
Change the line width for the selected object, lines, arrows, boxes and circles.

Arrow Style
Change the Arrow style for the selected object

Object positioning

Bring to Front
Brings the selected object in front of other overlapping objects.

Send to Back
Sends the selected object behind other overlapping objects.

Editing Tools

Cut
Removes the selection from the active document and places it on the Clipboard.

Copy
Copies the selected objects to the Clipboard.

Paste
Inserts the contents of the Clipboard at the insertion point, and replaces any selection. This command is only available if you have cut or copied an object to the clipboard.

Reset Objects
Delete changes to your chart or delete all additional annotations. Click the appropriate option and click OK. If you decide to delete all additional annotations, a confirmation screen is displayed.
**Undo**

Undo last annotations that have been applied to a chart.

**Redo**

Redo last undo

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**Note:**

*Changes made to default text and chart properties will not be saved in a template.*

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**Fill effects**

You can apply a foreground pattern and colour and a background colour to fill selected objects. Select **Fill Effects** from the **Fill Colour** button drop down palette. The **Fill Effects** dialog is displayed.

**To apply a pattern and colours:**

1. Select the **Patterns** tab.
2. Select the fill pattern you want.
3. Select a foreground colour from the **Foreground**: drop down palette.
4. Select a background colour from the **Background**: drop down palette.
5. Click **OK**.

**To apply a gradient fill:**

1. Select the **Gradient** tab.
2. Select the colours you want.
3. Select **Horizontal** or **Vertical** gradient.
4. Select the fill style.
5. Click **OK**.
Format Object

You can format colours, lines, arrow styles, and text on selected objects. Right click the mouse and select **Format Objects** from the menu. The **Format Object** dialog is displayed.

To format fill colour, line colour and width and arrow styles:

1. Select the **Colours and Lines** tab.
2. Select the fill colour from the **Colour**: drop down palette in the **Fill** section.
3. Select the line colour from the **Colour**: drop down palette and line width from the **Width**: box in the **Line** section.
4. Select the arrow styles from the **Begin style**: and **End style**: drop down boxes and the size from the **Begin size**: and **End size**: drop down boxes in the **Arrows** section.
5. Click **OK**.

To format text styles:

1. Select the **Text** tab.
2. Select the text styles you want from the dialog.
3. Click **OK**.
Remove Chart Changes

You can reset original chart elements and remove user added annotations for the whole chart or for selected objects. Click the **Reset Objects** button or right click the mouse and select **Reset Objects** from the menu. The **Remove Chart Changes** dialog is displayed.

**To Remove chart changes:**

1. Select **Reset Original Chart Elements** and /or **Remove User-Added Annotations** from the **Action** section.
2. Select **The Whole Chart** or **The Selected Elements** only option from the **Perform Action On** section.
3. Click **OK**.
Using flexible chart

Why use flexible chart?

Flexible chart gives you the flexibility to create your own chart layouts in Advance. Once you have created your layouts, you can store them for use with other series using **favourites**, see using **favourites**, page 99.

Flexible chart enables you to create multiple chart layouts with multiple series plotted using a variety of different chart types and styles.

You can:

- Create layouts with up to four graphs per chart.
- Plot up to 8 series on one graph, or 12 series over more than one graph.
- Select series from different data categories, with different datatype and currency settings.
- Select from straight line plots, thin and composite bars, candlesticks and high/low/close plots for each series plotted.

The amount of data and flexibility with which you can present it, lends itself to the creation of business studies or detailed comparisons. For example, you could compare the performance of four similar stocks on one graph, show the performance of the market index on another graph and finally show several economic indicators for the relevant country on a third graph.

The charting options, accessed from the **Settings** wizard, enable you to quickly build up charts from simple layouts to quite complex formats with shading and grid styles. The following section shows you the kind of things you can do with this powerful tool.
Flexible chart features

The following example is an equity study examining the stock price movements of a leading UK retailer. The study was produced using a flexible chart pre-formatted template and illustrates the different chart styles and options you can select.

You can:

- Choose from 8 pre-formatted templates, for example Four Graphs - 25%, 25%, 25%, 25% as shown here.
- Specify a title for the whole chart, a title for each individual graph, and display today’s date.
- Use the default series name for the legends or display your own legend descriptions.
- Plot up to eight series on one graph.
- Select from eight rebasing options for multi-series comparisons. For example, rebased to 100 as shown here.
- Set a different display period for each graph.
- Set the scale for both left and right-hand Y axis scale for each graph. Use the default optimum ticks for the X axis or specify your own customised ticks.
- Select individual chart types for each series to be plotted. The FTSE100 shown here is plotted using a high/low/close chart.
Multi-graph layouts and positioning

The flexible chart facility, unlike other Advance charts, gives you greater flexibility in the way you can lay out your plotting information. You can choose from eight pre-formatted templates or design your own customised layouts.

- **Pre-formatted templates**
  
  Eight pre-formatted templates are provided to enable you to quickly create a multi-graph layout. The layouts range from simple single graph layouts through to four graph layouts. The types of layout available is dependent upon the number of series you select. For example, if you have selected two series, then only the first four of the following pre-formatted templates are available for selection:
  
  - Single Graph - suitable for comparing up to eight series in line plots
  - Two Graphs 70% and 30% - suitable for combining graph types where the top reserved area could be used to display a wider Y scale or display bars
  - Two Graphs 50% and 50% - suitable for comparing like with like, e.g. comparing the price performance of two stocks as line plots and candlesticks
  - Three Graphs 50%, 25%, 25% Horizontal - suitable for producing three graph studies where room for the X axis is needed
  - Three Graphs 25%, 50%, 25% Vertical - suitable for producing three graphs studies where room for the Y axis is needed
  - Three Graphs 50%, 25%, 25% - suitable for producing three graphs studies where space is maximised
  - Four Graphs 25%, 25%, 25%, 25% - suitable for producing four graph studies up to a maximum of 12 series plotted.

- **Customised layouts**
  
  You can also create your own templates using the settings wizard. You can create custom layouts including up to four graphs in one chart. For each chart, you can specify the x and y positioning and watch your new graph take shape in a display window. See Customising chart layouts, page 81.
Graphs with different display periods and plotting frequencies

For single graph layouts or custom single graphs, as with most Advance charts, you can use the Select Date facility on the Request screen to determine the default display period for your requests. The default could be:

- A period of days, months and years in the past relative to today’s date or latest available date/time where data is available (i.e., an intraday pricing point). This relative period could start on the Datastream base date for the series.
- A fixed period of days, months and years in the past.
- A number of year ends for retrieving company accounts data.

All these display period options are available to you when using the flexible chart facility.

If you are using layouts with multiple graphs you can override the default display period and set individual start/end dates for each graph. The Customise individual start and end for all graphs option on the settings wizard enables you to use the Select Date facility on each graph’s Graph Settings wizard.

This feature is useful if you want to analyse, for example, the performance of several stocks over a short time period and compare this performance against a background economic indicator over ten years.

Whatever display period you choose, a default plotting frequency is automatically assigned to help keep the number of line plots to a practical number.

- Period of up to two years, the plot frequency is daily
- Period of up to 10 years, the plot frequency is weekly
- Period of over 10 years, the plot frequency is monthly

The Frequency option on the Graph Settings wizard enables you to override the default plotting frequency with daily, weekly, monthly, quarterly and yearly plotting frequencies. You could, for example, display the performance of a bond over two years using a monthly plotting frequency instead of a daily plotting frequency.

Note:

Care must be taken when using display periods and plotting frequencies so that you get exactly the data that you need. Datatypes for certain series can only be plotted at set frequencies. For example, some Economic series are only available on a monthly, quarterly or annual basis, and company accounts series (including third party company accounts) are only available on an annual basis. When using series plotted with the high/low/close, daily closing price information must be available for the selected series. When you have selected an inappropriate display period or plotting frequency, you will receive a warning, e.g. Sorry this request has failed - SELECTED TIME PERIOD IS TOO LONG FOR...
Assigning different series and properties to each graph

You can set individual series, graph, and axis properties for each series in each graph you have set up for your chart, using dedicated settings screens. This means that each series can be plotted in a different way on the same graph, and each graph can have its own display properties. You can save your settings as defaults.

- **Series Settings**
  - You can specify the following for each series:
    - Your own line legend or default legend using the series title
    - Display series on left or right-hand axis
    - Choose from 9 chart types including line chart, line chart with fill below line, line chart with fill above line, line chart with shading around line, bar chart, composite bar chart, thin bar chart, candlestick and high/low/close chart.
  - See Setting individual series properties, page 83.

- **Graph Settings**
  - You can specify the following for each graph set up for the chart layout:
    - Display period (overriding the default display period for the data category)
    - Your own graph title or default title using the series title
    - Choose from eight rebasing options including displaying actual values, all series rebased to start at 100 and second series rebased to first
    - Display high, low and last price information for each series at the bottom of the graph (one graph only)
    - Choose between three grid styles
    - Override default plotting frequencies with a choice of daily, weekly, monthly, quarterly and yearly frequencies
  - See Selecting individual graph properties, page 84.

- **Axis Settings**
  - You can specify the following for each graph:
    - Display Y axis scale on both left and right-hand axes
    - Specify Y axis scale as either linear or logarithmic
    - Choose to display X axis with optimum ticks or override default ticks with daily, weekly, monthly or yearly ticks
    - Specify the scale range for the X and Y axes
  - See Selecting axes properties, page 86.

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**Note:**

*You can save your settings as defaults, Click the Save as Default button.*
Making flexible chart requests

The following procedure shows you how to make a basic flexible chart request.

To make a basic flexible chart request:
1. Select the **Comparison** tab.
2. Select the **Flexible Chart** tool from the list displayed.
3. Select a data category from the **Category** drop down box.
5. Select a datatype, if a datatype other than the default is required. See Selecting a datatype, page 13.
6. Click the **Add Series** button to add the selected series (and datatype) to the comparison request list.
7. Repeat steps 3 to 5 for each series you want to appear on the chart(s) (up to a maximum of 12 series).
8 Click the **Settings** button. The **Chart Wizard** is displayed.

9 Select your chart layout. Click the **Change Chart Layout**... button, if you want to change the default pre-formatted chart template or create your own customised layout. For details on creating your own chart layouts, see **Customising Chart Layouts**, page 81.

10 Select your date display options.
11 Type a chart title in the **Chart Title** field if you are using a layout with more than one graph.
   You can use the **Properties** settings to enter a title for each graph.

12 Click **Next**.
   The **Assign Series to Graphs** dialog is displayed.

13 Select the series to be displayed on the graphs for the selected layout:
   • Select the graph.
   • Select the series you want to display on the graph.
   • Click the **Add** button to add the selected series to the graph, or double-click the series.
   • You can remove any series from the graph. Select the series in the graph list and click the **Remove** button, or double-click the series.

14 You can raise and lower each series in the graph list by selecting a series and clicking the **Raise** and **Lower** buttons.

15 Select the Series, Graph, and Axis Settings for each graph:

16 Click a graph tab.
   • Click the **Properties...** button.
   • Click the **Series Settings** tab and select series settings for each series.
     See **Setting individual series properties**, page 83 for details.
   • Click the **Graph Settings** tab and select the graph settings.
     See **Selecting individual graph properties**, page 84 for details.
   • Click the **Axis Settings** tab and select the axis settings.
     See **Selecting axis properties**, page 86 for details.

17 Repeat the above steps for each graph in your chart.

18 Click **Finish** to save your flexible chart settings.

19 If you selected individual display periods for each graph, the following message is displayed in the **Date** field:
   **Set dates per graph via flexible chart settings**

20 Click **Run Now** to make your flexible chart request.

When the result is displayed, you can:

- Click the **Add Request** button to add the request to the current open Project. You can then schedule this request for future, overnight refreshing using **Night Shift**, or refresh the request on an ad hoc basis using the **Navigator** or **Project** screen.

- Click the **Favourites** button to create a **Favourite**. This enables you to identify and select the request from the **Favourites** dropdown list, and change the first series (and datatype), if the symbolic option is used.
Making a flexible chart request for a list of series

You can use lists in a flexible chart request to create either:

- a chart of 1 to 4 graphs for each item in the list
- a chart with more than one line plotted on each graph. From two lines per graph on a 4 graph chart, to 8 lines on a single graph chart

To create a chart for each item in a list

1. Select the Comparison tab.
2. Select the Flexible Chart tool from the list displayed.
3. Select local lists or constituent lists from the Category drop down box.
4. Select a local list from the lists displayed or use Navigator to find a constituent list. See Selecting a series, page 3.
5. Select a datatype, if a datatype other than the default is required. See Selecting a datatype, page 13.
6. Click the Add Series button to add the selected list to the comparison request list. Add the list once for each graph in the chart. For example, once for a single graph chart, twice for a two graph chart, up to four etc. **Note:** If you are adding the list more than once, a dialog asking if you want to use the multi-line option is displayed. Click No.
7. Continue from step 8 of the procedure: To make a chart request, page 78.

To create a chart of multi-line graphs

1. Select the Comparison tab.
2. Select the Flexible Chart tool from the list displayed.
3. Select local lists or constituent lists from the Category drop down box.
4. Select a local list from the lists displayed or use Navigator to find a constituent list. See Selecting a series, page 3.
5. Select a datatype, if a datatype other than the default is required. See Selecting a datatype, page 13.
6. Click the Add Series button to add the selected list (and datatype) to the comparison request list.
7. Continue to add the list, up to a maximum of 8 instances, depending on how many lines you want per graph. A dialog asking if you want to use the multi-line chart option is displayed. Click Yes. Adding the list 8 times for a single graph chart gives 8 lines on one graph, 8 times for a two graph chart gives four lines per graph, etc.
8. Continue from step 8 of the procedure: To make a chart request, page 78.
Customising chart layouts

You can create your own chart layouts using the Configure manually option in the Flexible Chart wizard. Click the Change Chart Layout... button on the opening wizard screen and select the Configure Manually tab.

- The left window displays the current graph position of the graphs selected. The Y and X axis scales show the co-ordinates of each graph. As you change these co-ordinates, you can watch the graph position move in this window.
- You can change the co-ordinates for each graph. Click the respective check box on the right and change the co-ordinates using the up and down buttons. If you have only two graphs, you can check the other graph check boxes to display other available positions.

To create a three graph layout with ‘white space’ around each graph:

1. Select the Comparison tab.
2. Select the Flexible Chart tool from the list displayed.
4. Select a datatype, if a datatype other than the default is required. See Selecting a datatype, page 13.
5. Click the Add Series button to add the selected series (and datatype) to the comparison request list.
6 Repeat steps 3 to 5 for each series you want to appear on the chart(s) (up to a maximum of 12 series).

7 Click the Settings button. The Chart Wizard is displayed.

8 Click the Change Chart Layout... button.

9 Click the Configure Manually tab.

10 Click the check boxes for Graph1, Graph 2 and Graph 3.

11 For Graph 1, use the up and down buttons to set the co-ordinates to Left 7, Right 92, Bottom 57, and Top 100.

12 For Graph 2, set the co-ordinates to Left 7, Right 48, Bottom 1, and Top 50.

13 For Graph 3, set the co-ordinates to Left 52, Right 92, Bottom 1, and Top 50.

14 Click OK to confirm your custom settings. The Chart wizard now confirms your new customised chart layout.

The new custom format can be used along with the other series, graph, and axis settings.
Setting individual series properties

You can select chart attributes for individual series for one graph at a time.

To set individual series properties:

1. With your chart layout selected and your series assigned to each graph (see making flexible chart requests, page 77 steps 1 – 11)
2. Select a Graph tab on the Assign Series to Graph dialog.
3. Click the Properties... button.
   The Properties dialog is displayed.

4. Select the Series Settings tab.
5. Select a series from the displayed list.
6. Either type your own Line legend description (up to 96 characters), or select a legend type from the Legend Options dropdown list.
7. Select an Axis Display option.
8. Select a chart type. As you click on an example, a description of the chart type is displayed.
   If you choose Bar Chart or Composite Bar Chart, you can centre the bars around the middle or end of financial years for company accounts.
9. Click OK to confirm your settings
   OR
   Click the Graph Settings or Axis Settings tabs to continue.
Selecting individual graph properties

The **Graph Settings** screen within the settings wizard enables you to select attributes that affect the way data is displayed on the graph. The properties are assigned to one graph at a time.

**To select individual graph properties:**

With your chart layout selected and your series assigned to each graph (see making flexible chart requests, page 77 steps 1 – 11).

1. Select a graph tab on the **Assign Series to Graph** dialog.
2. Click the **Properties...** button.
   The **Properties** dialog is displayed.
3. Select the **Graph Settings** tab.
4. Click the **Select Date** button.
   The **Configure Dates** dialog is displayed.
5. Select a fixed or relative display period.
   See Display period adjustments, page 11 for details. If you have selected a single graph layout, you can ignore this option as the display period will be set by the default on the **Request** screen.
6. Type a title for the graph (up to 60 characters) in the **Graph Title** field.
   If you have selected a single graph layout, this title is the title of the chart. Click the **Use First Series as Title** check box to use the Datastream series name of the first series as the title.
7 Select one of eight rebasing options from the Rebased to: drop down list.

8 If you have selected a single graph layout, you can display high, low and last price information for up to four series. Select the display options from the Display high, low and last: drop down list. For multi-graph layouts, this option is not available.

9 Click a Grid Display button to choose a grid style. If you select a horizontal grid type, you can display intermediate Y axis grid lines.

10 Move the Frequency slider to increment, or decrement the plotting frequency of the graph. This overrides the default plotting period assigned by Datastream for the display period.

11 Click OK to confirm your settings
OR
Click the Series Settings or Axis Settings tabs to continue.
Selecting axes properties

The Axis Settings screen within the settings wizard enables you to determine how the Y and X axes are displayed on each graph of your multi-graph layout. The axis settings need to be made for each graph you have set up, however you can just accept the default settings.

To select axes properties:
With your chart layout selected and your series assigned to each graph (see making flexible chart requests, page 77 steps 1 – 11).

1. Select a graph tab on the Assign Series to Graph dialog.
2. Click the Properties... button.
   The Properties dialog is displayed.
3. Click the Axis Settings tab.
4. You can display or turn off the Y axis scale. Select options from the Y Axis Settings dropdown list. If you display the Y axis, you can display the scale on the right-hand side of the graph and select the type of scale from the Y Axis Scale dropdown list.
5. You can display or turn off the X axis. If you click the Display X Axis check box, you can choose to display Optimum ticks (default), or Customised ticks from the drop down list.
6 If you display the Y axis, you can select the start and end of the Y axis scale for the Left hand and Right hand axes. This is useful if you want to bring the line plot into a tighter range to make it legible.

7 If you are plotting a number of series on one graph and intend to plot them on different right and left-hand scales, you can invert the axis. Check the Invert axis check boxes. This is useful for comparing the relative performance of opposing series.

8 Click OK to confirm your settings OR
Click the Series Settings or Graph Settings tabs to continue.
Using symbolic series in flexible chart requests

You can use Favourites with Flexible Chart to create a chart that uses a symbolic first series. For example, you could use this chart to compare equity series against indices.

To create a flexible chart tool with a symbolic series:

Create your flexible chart layout as required and make the request (see Making flexible chart requests, page 77).

1. The position of the series in the list on the Assign Series to Graphs screen is important; the first series in the list for Graph 1 is the series that is used symbolically.

2. Click the Favourites button. The Favourites dialog is displayed.

3. Type a title for your flexible chart tool and click the Create first series as symbolic check box.

4. Click Save to save your new flexible chart tool. The Set annotations dialog is displayed.

5. Select: from a template to apply annotations from a template from current request to save the annotations applied to the current request no annotations to save without annotations.

6. Click OK.
To issue a flexible chart request using a different first series:

1. Select the required flexible chart tool from the Favourites dropdown list. The series, datatype, and date parameters are displayed.

2. Select your series. See Selecting a series, page 3. This series is now displayed in the comparison request list next to the heading Symbolic.

3. Click Run Now to make your flexible chart request.
Converting and creating 401X formats

You can convert 401X formats created in DS Windows, for use in Advance. These are saved as Advance projects.

You can create a 401X format from a flexible chart in Advance for use in DS Windows.

You can create 401X formats with symbolic series and save them as global formats - GXXX. You can use these Global formats in DS Windows and in the Advance Datastream 401X format comparison tool.

To convert a 401X format to an Advance project:

1. Select Convert 401X formats from the Tools menu. The flexible chart format conversion screen is displayed.
2. Search for the formats you want to convert. You can search User or Global formats.
3. Click the Add button to select a format for conversion. You can select as many as you want.
4. Click the Selected items button to display the formats selected. You can remove formats at this stage; click the Remove button.
5. Click the Download button to convert your format. The Save as dialog is displayed.
6. Select a folder in the Save in: field, type the name in the File name field, and click Save.
7. Close the flexible chart format conversion screen to return to Advance.

To view converted 401X formats:

1. Select Open from the File menu.
2. Select the project you saved the format as and click Open.
3. Click the Update Request or Update Project button or double click in the display area to update the request.
4. The results are displayed. Click Settings to edit the flexible chart properties.

To create a 401X format in Advance:

1. With your flexible chart displayed, right click on flexible chart (in the comparison window) and select Create 401X format from this chart from the menu.
2. Type a name in the Format title field.
3. Type a format code, optional. If you choose not to, a code is created for you.
4. Click OK.
Creating a 401X format with symbolic series

You can create 401X formats with symbolic series and save them as global formats - GXXX. You can use these Global formats in DS Windows and in the Advance Datastream 401X format comparison tool.

To create a 401X format with symbolic series (X, Y, Z, and A):

1. Select the Comparison tab.
2. Select the Flexible Chart tool from the list displayed.
3. Select Local lists from the Category drop down box.
4. Select a list (any list will do).
5. Click the Add Series button to add the selected list to the comparison request list. Repeat steps 3 to 5 for each variable, ie add the list once for one variable, X, or four times for four variables, X, Y, Z, and A.
6. Click the Run Now button.
7. Right click in the Comparison tab window and select Create 401X format from this chart from the menu.
8. Type a name in the Format title field.
9. Click OK. A dialog is displayed giving the GXXX number for the format.

To use a 401X format with symbolic series in Advance:

1. Select the Comparison tab.
2. Select the Datastream 401X format tool from the list displayed.
3. Select the series and add them to the comparison request list.
4. Click the settings button. Type the global format number, or click the Series navigation button to search for and select one in navigator.
5. Click the Run Now button. The results are displayed.

You can now transfer the results to Word, PowerPoint, or Excel as refreshable objects. These are updated when opened, reflecting any changes to the Global format.

Excluded options for converted 401X formats

Symbolic series

When a 401X format uses the symbolic series X, Y, Z, or A, these symbolic series will be replaced with actual series codes, as Advance flexible charts do not support the
use of symbolic substitution.
The series used for substitution will be taken from those stored in Advance. These can be viewed or changed via the **Tools>Options** dialog.

**Less frequently used 401X options**

Some less frequently used 401X options are not supported in the conversion. Where an option is not supported, a similar one is used in its place. The following list shows the options excluded and their substitutions:

- LGL Option (Logarithmic scale on left hand Y axis, linear scale on right hand Y axis) changed to LOG (Logarithmic scale on both Y axes)
- LGR Option (Logarithmic scale on right hand Y axis, linear scale on left hand Y axis) changed to LIN (Linear scale on both Y axes)
- XAX(n) Option (Grid lines parallel to X axis, drawn against the n-th Y axis label) changed to XAXS (Grid lines parallel to the X axis, drawn against every Y axis label)
- LAX(n) Option (Grid lines parallel to Y axis, drawn against the n-th X axis label) changed to XAXS (Grid lines parallel to the Y axis, drawn against every X axis label)
- XAI(n) Option (Grid lines parallel to the X axis, drawn against the n-th Y axis label, with intermediate lines being drawn between each grid line) changed to XAI (Grid lines parallel to the X axis with intermediate lines being drawn between each grid line)
- YAI(n) Option (Grid lines parallel to the Y axis, drawn against the n-th X axis label, with intermediate lines being drawn between each grid line) changed to YAXS (Grid lines drawn parallel to the Y axis, drawn against every X axis label)
- BI(n1n2) Option (Grid lines drawn against both axes, with X axis grid lines being drawn against every n1-th X axis label, and Y axis grid lines being drawn against every n2-th Y axis label, with intermediate grid lines being drawn between each grid line) changed to BOTH (Grid lines drawn against both axes, drawn against every axis label)
- BT(n1n2) Option (Grid lines drawn against both axes, with X axis grid lines being drawn against every n1-th X axis label, and Y axis grid lines being drawn against every n2-th Y axis label) changed to BOTH (Grid lines drawn against both axes, drawn against every axis label)
- HLL(n) Option (‘Data Displayed’ option). Advance flexible charts will only display High/Low/Last information for the first series in a flexible chart, the option HLL1 will be used.
- NO,FULL,WILO,QILO Options (‘Data Displayed’ options). Changed to HLL1 if the chart would normally have displayed High/Low/Last information at the foot of the display, or NHLL if High/Low/Last information would not have been displayed.
Using Projects

About Projects

Projects are a simple and convenient way of managing requests and recalling frequently used reports, charts, and data formats. A Project could, for example, be used to contain a number of report and chart requests on each currency within a client's portfolio, or sector of interest.

Once you have created a Project, it can be refreshed on a one-off basis using a refresh button, or scheduled to be refreshed overnight using Night Shift, see Schedule Night Shift, page 100.

You can:

- Create new Projects, open and save existing Projects using buttons on the tool bar.
- Refresh one request, or all requests using the refresh buttons.
- Adjust the column widths in the Project list area to view additional Project details.
- View the display details e.g. start date, data type, for each request using the scroll bar.
- Organize your Project requests by selecting a sort category, and by keeping Local Lists and Constituent requests together.
- Find specific requests, in your Project list, using the Find: field
- View your report, chart, and data results for a Project in the display area and adjust the area for better viewing.
Selecting a request

To select a request for viewing or updating:
- Select the request description line.
  The Keep Lists Together option on the Project screen displays all individual series requests together with their Local List and Constituent List requests.

Search
You can identify the required request by using the Find: and Sort facilities. Either:
- type part of the request description in the Find: field. Click Find Next to keep searching.
- or choose a sort category (for example, Description, Analysis tool, and so on).
You can also use the Goto function (by right-clicking in the display area) to display all 'series' Local List requests for the Project on a separate selection screen.

Editing the description and comment of a request
You can change the description for a request and add a comment for your own reference. To do both, uncheck the Keep Lists Together check box, right-click over the request description and select:
- Edit Description – to overtype a new description over the default supplied description.
- Edit Comment – to type a new, or edit an existing, free text comment.
Press the RETURN key to confirm your changes.
You can also use the function key F2 to edit the description.

Merging Projects

You can merge any number of projects to create a new project. Alternatively you can merge them with an existing project.

To merge projects:
1. Select Merge projects… from the File menu. The Select projects dialog is displayed.
2. Select the projects and click Open. The Select the destination project dialog is displayed.
3. Type the project name and click Save.

The new project is opened when the merge is finished.
Selecting multiple requests

You can export and delete more than one request at a time.

To select multiple requests:

1. Hold down the CTRL key and use the mouse to select the requests you want to export or delete.
   You must select in the left hand column of the grid.

User defined ordering of projects

You can sort your requests in to an order that is more appropriate or convenient to you.

To re-order your projects:

1. Click the Use User Defined Order box on the Project tab.
2. Select the request you want to move.
3. Click the Up and Down arrows to move the request up or down.

Note:
If the Keep Lists Together box is ticked, you can only move the requests up and down within their parent list.
If the Keep Lists Together box is not ticked, you can move the requests anywhere within the project.
Printing a project

You are able to print every request in a project with a single command. You are also able to choose how your project should be presented i.e. how many charts should be printed on each page.

1. Go to the File menu and select Print Project. The Print Project dialog box will appear.
2. Select the number of charts you would like to be printed across and down each page. The number of pages to be printed will change to reflect any changes you make here.
3. Select the orientation of the page, Portrait or Landscape.
4. To make your settings the default, click Make Default.
5. Click Print.

Transferring charts to a new or existing project

In Advance 4 you are able to transfer charts from one project to another or a brand new project.

1. Select the charts you require from the current project.
2. Right-click and select Transfer… and Advance Project from the menu. The Select a Destination Project dialog will appear.
3. To transfer the charts to an existing project, select the project. To transfer the charts to a new project, enter the filename for the new project.
4. Click OK.
Editing the Description and Comment fields

You can edit the description and comment fields by selecting the **Edit Description** option on the right mouse click menu.

**To edit the Description and Comment fields:**
1. Select **Edit Description** from the right mouse click menu. The **Edit Description** dialog is displayed.
2. Type the new description in the field displayed.
3. Click **OK**.

Editing the start and end dates used in a project

You can edit the start and end dates of requests in a project. You can select individual requests or select multiple requests, see selecting multiple requests.

**To edit the start or end dates of a request:**
1. Select **Edit start date**, or **Edit end date**, from the right click menu.
2. Type the new date.
3. Click **OK**.
Using the browse bar

You can use the Browse bar, located on the Request screen, to browse through a list of existing requests in the current Project for viewing or refreshing.

- The inner arrow buttons step you through the request list, one request at a time. The right arrow button steps forward, the left arrow button steps backwards.
- The outer left-hand arrow button jumps to the beginning of the list, and the outer right-hand arrow button jumps to the end of the list.

If you select a list ‘title’ request:
The display area shows what the request was for, the tool, and date created. Double-click in the display area to refresh the whole Local List request.

If you select a series request:
The results of that request are displayed.
Using favourites

About favourites

The **Favourites**: drop down box and button, located underneath the chart/report selection area on the **Request** screen, enables you to add, select, store and retrieve your favourite chart, report and data requests saving you time searching for the required details. **Favourites** enables you to select and store a chart/report with screen and settings parameters (i.e. display period, datatype, currency, etc.) leaving you free to select a new series each time you use your stored Favourite.

Your favourite reports, charts and data requests can be given a unique name and held in a dropdown list for easy retrieval. When you select a favourite, the appropriate tool is highlighted.

Creating a favourite

**To create, store, and retrieve a favourite:**

1. Select a chart, report, or data request.
2. Select a display period, datatype or currency, if required.
3. Click the **Favourites** button.
4. Type a description in the dialog displayed, and click **OK**. If you do not type a description, the Favourite will not be saved.
5. Your stored Favourite can now be selected from the **Favourites** dropdown list above the **Settings** button.

**To issue a request:**

6. To issue a request:
7. Select a Favourite from the drop down list.
8. Select a series.
9. Click **Run Now**.

If you have created a Favourite using the **Flexible Chart and Symbolic First Series** option, you need to supply a new series. See Using symbolic series with flexible chart requests, page 88.

**To delete a favourite:**

1. Select a Favourite from the dropdown list.
2. Press the **DELETE** key.
3. Click **OK** on the confirmation dialog to confirm deletion.
Scheduling updates

What is Schedule Night Shift?

Advance Night Shift allows you to refresh any number of Projects at a future time and on a regular basis. For example, you can choose to have one or all your Projects refreshed overnight giving you access to your charts, reports and data the following day. You can also use a third party scheduler such as Microsoft Schedule Tasks, which does not require Advance to be left running.

The Schedule Night Shift dialog (above) enables you to specify the time and date to refresh the selected Projects. It also enables you to add or remove Projects from the schedule. If you want to process the schedule before the next scheduled update, you can reset the status of any Projects and process them straight away using the Schedule Now option.

Options provided on the Schedule Night Shift dialog:

- **Project Settings** - enables you to automatically export, and print, charts and reports when they have been refreshed. The export and print options can be applied to individual Projects in your schedule list. See Scheduling Projects and Project Settings, page 101.

- **Schedule Specials** - enables you to schedule equity search formats (that have been flagged) for refreshing. This can be scheduled independently of the Schedule Project facility. See Scheduling Equity Search Formats and Series Coverage Update, page 104.
Scheduling Projects and Project Settings

You can schedule Projects for immediate and future refreshing and apply print and export settings. You can also use a third party scheduler, such as Microsoft Schedule Tasks, which does not require Advance to be left running.

To schedule Projects for refreshing:
1. Select the **Schedule Night Shift...** option from the **Tools** menu.
2. Click the **Add Project** button and select the project to schedule.
3. Click **Open**. The project is added to the Schedule details list.
4. Click **OK** to refresh the project.

To select the project settings:
1. Select the project in the Schedule Details list that you want to apply settings to.
2. Click the **Settings** button to select your print and export options.

The **Schedule Night Shift** settings dialog is displayed.

Options displayed on this dialog enable you to:

The options displayed on this dialog enable you to:
- Print all requests after updating
- Export all requests after updating
- Choose the desired export format for both charts and reports, which can be:

**Reports:**
- **.XLS** - for importing into Excel
- **.PRN** - for producing space delimited files for file printing
- **.TXT** - for producing tab delimited files for import into other packages such as
spreadsheets
  .CSV - for producing comma separated output for importing into other packages
  .HTM - for publishing on a Web site

Charts:
  .CGM - for exporting to common Windows applications
  .EPS – for producing postscript files for high definition graphics printing
  .GIF – for displaying graphics in Web sites
  .PCX – for use with PC Paintbrush
  .WMF – for exporting a chart in the Windows clipboard format

• Select either a symbolic or title file name for the export file. The Symbolic file name option creates file names that are in the form aammyynn where aa are ascending alphabetic characters, mm is the current month, yy is the current year, and nn are sequential numbers. The Title file name option takes the names of the series in the request to produce a file name. You are now able to create your own Custom file name, either using special tokens or any text. These options are only available when you select Export after processing.
• Select the Graph print/ export scheme. The styles you set up and save in the properties dialog can be applied to projects scheduled for night shift.
• When printing, set the number of charts to be printed on each page.

3 Click OK to apply the settings.
The selected settings are displayed in the Project Settings box.

4 Click OK to schedule your projects.

Tip:
The Schedule Night Shift display window shows the Projects, the date they are due for update, and their current status (done and not done) for the schedule you have just compiled. If you want to view the details for other schedules, click the History button to display a complete history log of all past scheduled refreshes.

To select the date, time, and frequency for future refresh:
1 Click the Schedule For Future option button (the date parameters become available).
2 Use the Date and Time options and the Frequency dropdown list to select:
  • Date - click on the day, month, and year box in turn to specify a date, alternatively use the dropdown calendar (to the right of the date options) to select a specific calendar date.
  • Time - click on the hour and minute box in turn to specify a time.
  • Frequency - choose a frequency type (daily, weekly, etc.) from the Frequency dropdown list.
3 Click the **Save date** button to apply the date changes. A dialog is displayed asking you to confirm the update.

4 Click **OK** to schedule your project.
Scheduling Equity Search Formats

You can schedule equity search formats for future, out-of-hours processing. If you want to run equity search refresh and/or series coverage update straight away, select the Schedule Now option and ignore steps 3 and 4 below.

To schedule equity search refresh:

1. Select the Schedule Night Shift... option from the Tools menu.
2. Click the Schedule Specials tab.
3. Click the Schedule For Future option (the date parameters now become available).
4. Use the Date and Time options and the Frequency dropdown list to select a:
   - date - click on the day, month and year box in turn to specify a date, alternatively use the dropdown calendar (to the right of the date options) to select a specific calendar date.
   - time - click on the hour and minute box in turn to specify a time.
   - frequency - choose a frequency type (daily, weekly, etc.) from the Frequency dropdown list.
5. Click Refreshable Equity Searches in the Schedule Type window and click the Add (+) button, if required.
6. Click OK to schedule your ‘specials’.
Using equity search

Why use equity search?

Equity search enables you to search across markets for equities that meet a wide range of criteria. The equities are displayed in a list in the form of an on-screen report together with the your chosen criteria. You can use this data to make comparative analysis between equities in markets or lists on key datatypes. You can store the search criteria as search requests to carry out future searches and produce updated lists.

Equity search enables you to:

- Search for equities in up to 10 specific markets, industry groups, or user created lists.
- Search for the equities using up to 10 dedicated Datastream, Worldscope, MCSI, I/B/E/S, or Datastream company accounts search items.
- Include Datastream global expressions or your own user created expressions as 10 search criteria.
- Impose limitations on the search items/datatypes used and determine the units of value and currency displayed.
- Set sort criteria on key datatypes.
- Create lists from the results for use with your Local List requests.
Equity Search – Business Examples

To illustrate the possible business uses of Equity Search, the following four examples have been chosen to show the breadth and flexibility of the facility.

**Ranking of stocks in a market on a key datatype**

With Equity Search you can quickly display lists of stocks in any chosen market ranked according to a key datatype with an imposed limitation. The resulting list can be saved as a Local List and used with the available chart and report requests to aid your research. For example, you could search for a number of stocks on market value, save the resulting list, and issue a Price and Price Relative request against each stock in the Local List.

This example lists the top 100 equities in the French market by market value, ranked in descending market value order with values displayed in French Francs.

- 100 stocks out of the French market are displayed in descending market value order. The currency is displayed on screen to aid interpretation. You could further refine this list by increasing or decreasing the market value limit.
- You can display up to 10 datatypes across the report. Each of these could have a limitation imposed, if required. For example, the search criteria could be amended to display all stocks under FF50,000 M. This would exclude the top company in this list.
Global sector comparison on sales

Another powerful feature of Equity Search is its ability to compare sector information across broad geographical areas. This can be particularly useful if you want to analyse the market presence of companies in specific market sectors in a number of countries.

In this example, the total sales of leading chemical industries are broken down by geographical areas, which include Europe, Americas, Asia, Australasia, and Africa. Chemical companies are selected from these countries only where their total sales for the latest company accounts are over £10M. The companies are listed in descending total sales order. The fast search item used in this example is 104 (total sales).

You could refine this list, for example by increasing the total sales amount, say to £100M and add further related industry sectors such as Chemicals, Speciality and Chemicals, Technology.

- The results of the search show 246 chemical companies, out of a total of 15,057 for the global sector, that have total global sales exceeding £10 million in total sales. This example shows the first 10 companies in ascending alphabetical order. You can choose to display these sales values in whichever currency or unit you like.

- You could refine this list, for example by increasing the total sales amount, say to £100M and add further related industry sectors such as Chemicals, Speciality and Chemicals, Technology.
Third party data comparisons

As well as having access to Datastream fast search equity datatypes and company account items, you can also use I/B/E/S, MSCI and Worldscope datatypes with Equity Search. You can mix these third party datatypes with Datastream search items to cover wider areas of reported data.

In this example, a mix of MSCI monthly EPS and sales data is displayed with I/B/E/S EPS forecast data for the stocks in the UK market. This example shows that Equity Search can be used to compare the current EPS performance of selected stocks with their projected forecasts for FY0-FY1 and FY1-FY2.

The MSCI datatypes of MSEP, MSDPS and MSCP are displayed (where available) for FTSE ALL SHARE stocks whose total sales are over £20M. The resulting matches are displayed in alphabetical order.

You can use a number of dedicated MSCI datatypes which help to speed up your searches. You can use them to interrogate stocks in countries, sectors or lists, as shown here. This list of constituents is sorted alphabetically but you could list them by a key MSCI datatype, for example DPS Income Statement.

- You can use a number of dedicated MSCI datatypes, which help to speed up your searches. You can use them to interrogate stocks in countries, sectors or lists, as shown here. This list of constituents is sorted alphabetically but you could list them by a key MSCI datatype, for example DPS Income Statement.

- The I/B/E/S forecast data shows the percentage growth in EPS between now and Fiscal Year 1, together with the number of analyst estimates made. The percentage growth between FY1 and FY2, and the number of estimates are shown off screen. You can use scroll bars to adjust the display area either horizontally or vertically.
Company profitability figures across sectors

With Equity Search you can use Datastream global expressions or your own user created expressions to form part of your search criteria. These expressions allow you to combine datatypes or company account items with standard functions to produce calculated values for each stock selected in the search. For example, the following expression calculates the percentage change of earnings growth over one year.

\[ PCH\#(X/X(\text{PE}),1Y) \]

Where:
- \( PCH\# \) is the percentage change function
- \( X/X \ (\text{PE}) \) applies the earnings datatype for each stock.

When you select an expression, its description is displayed in the search wizard and in the results window.

You can use up to 10 expressions or you can combine them with Datastream datatypes to limit your search, as in the example below. This example shows the top 100 companies in the French market by market value, and percentage change details of earnings for each of these companies are sorted in ascending market value order within industry sector.
This comparison enables you to view the earnings growth over the past year in relation to current market value. You can use any combination of function and datatype with an expression by creating your own expression using the Expression Builder.

To aid interpretation of the search results, you can list the stocks by a datatype or expression, for example, by the expression Earnings as shown here.

In this example, Dassault Aviation has the largest market capitalization yet its increase in earnings potential doesn’t match the highest performer over the past year, Galeries Lafayette, with 51.61% change in price earnings.
Equity Search - Features

Here is a list of the most useful features of the Equity Search facility.

Search formats and Local Lists
When you use Equity Search to create new searches, Advance creates two types of records each having their own function.

- **Search request format**
  The search request format is a record that contains all the criteria you enter for your search. The record can contain:
  - Search universe details
  - Datatypes, expressions and limitations
  - Currency, units and sort details
  - Details of a Local List, if one has been created

  The search format is identified by a unique Format Code automatically assigned by Advance, and by a description that you type in the search wizard. Each time you create an equity search request, a search format is created enabling you to run the search request again, or modify its details.

- **Local Lists**
  Equity Search enables you to store the results from your search as a Local List. This list is just like any other Local List that you create using the Local Lists wizard. It has a unique List Code and description. When you have created the list, it is available for use under the Local Lists tab with your Advance chart and report requests. The stocks that belong to these lists will remain static, unless you refresh the search requests that they belong to. See Equity Search Project below.

Equity Search Project
All your search request formats are stored in a special Project. This helps to keep all your formats in one place and enables you to review, edit, and refresh your search requests. The Equity Search Project is displayed by clicking the Equity Search tab. Details of all existing search requests are listed on the Project screen.

- **Format Code** – The code of the search request.
- **Description** – The search request description.
- **List Name** – The name of the associated Local List.
- **Refresh** – Determines whether a search request (and its list) can be refreshed.
- **List Code** – The code of the associated Local List.
- **Last Uploaded** – The date when the Local List was last uploaded onto Datastream.
- **Last Updated** - The date when the Local List was last refreshed.
The Project screen enables you to:

- List and search through all the search requests in the Project. For Projects whose number of search formats extend beyond the view/selection area, you can use the Find: field to locate the search format you require. You can click on the column heading tab to select ascending or descending list order. For example, clicking on the Description column heading tab once, lists all the search requests by their description in ascending alphabetical order.

- Edit any listed search request. Select the search request and click on the Edit Search... button. The equity search wizard is displayed with the current search criteria details. You can amend these details in the same way as you create a new search. See Using Equity Search, page 105.

- Refresh any search request to update the associated Local List. For example, if your search format searches on market index constituents, you can refresh the search to select the current market index constituents. Click the Yes option for the requests that you want to Refresh. You can refresh requests individually by clicking the Refresh Current Request button, or the whole project by clicking the Refresh Project button.

Right-mouse clicks

If you move your mouse over the selection window and right click, a number of ‘short cut’ options are available to you:

- Refresh Current Search – refreshes the current search request.
- Refresh All Searches – refreshes all search requests that have been set for refreshing.
- New Search – opens the search wizard.
- Edit Search – opens the search wizard with the search criteria of the current search request.
- Delete Search – deletes the current search request.
- Allow Column & Row Resizing In Search Report – converts the Search Report into spreadsheet format where columns and rows can be resized.
- Default Report Column Widths – restores the default column widths.

Search report window

After each successful completion of a search request, the results are displayed in a results window adjacent to the Project screen.

- When you select a search request, the resulting number of stocks found are displayed as well as the individual criteria that make up your search.
If the descriptions of the stocks are too long to view in the search report window, you can click on the **Allow Column & Row Resizing In Search Report** check box and move the displayed column cells.

- The number of matches found for each search criteria (up to 10).
- You can right click the mouse in the results window to get **Search Refresh**, **Project Refresh**, and **Delete** options.
- Use the splitter bars or maximize button to increase the display area.

**Search Wizard**

All search and selection criteria, searching, viewing, and list creation is managed in the search wizard.

- **Search Universe** – you can define the universe in which to start your search from choosing up to 10 countries, constituents or User Lists.
- **Data Items** – you can enter up to 10 data items, which can be datatypes or company account items selected from Datastream, I/B/E/S, MSCI or Worldscope, or expressions.
- **Limitations** – you can impose limitations on the data items you have selected such as selecting an industry sector, entering maximum or minimum percentage changes or market values, or a ‘from and to’ range of values or percentages.
- **Display Characteristics** – you can determine the currency of the display values of your search, the unit of the displayed values and sort sequence (e.g., alphabetical, ascending, descending or no sort order).
- **Search Now!** – when you are happy with your search criteria, you can click on the **Search Now!** button to initiate the search on Datastream. Note: if your selection criteria generates a list of over 1000 series, the following message is displayed - This search has resulted in too many Equities. Please refine your search criteria.
- **View Results** – the results of your search criteria are displayed in the lists wizard. This shows the number of matches that have been found at each selection criteria level, the series and any values for each criteria.
- **Refine Search** – you can decide to alter or add to your selection criteria, if, for example, too many matches were found. Clicking the **Refine Search...** button allows you to review your selection criteria and make any amendments.
- **Save As List** – when you have the number of matches you want, you can save the displayed series as a Local List for use from the Local Lists tab. You can edit this list with the Lists Wizard, or overwrite the file with the results of a new search.
Creating a Search

To create a search and to save its format and resulting list of stocks, you need to progress through a series of steps. The following procedure provides an overview of these steps.

1. **Start Search** - see Starting a search, page 115
   
   Select the **Equity Search** tab and click the **New Search**... button

2. **Define Universe** - see Defining the universe, page 115
   
   Defining the Universe means identifying the countries, market lists, or user lists you want to search through. You can select individual country codes, constituent lists, or user created lists.

3. **Select Datatypes/Limits** - see Selecting Datatypes/Limits, page 117
   
   Your selection criteria can be a combination of up to 10 datatypes, company account items, or expressions with limits and values imposed on them.

4. **Select Industry Sectors** - see Selecting Industry Sectors, page 119
   
   You can further refine your search criteria by selecting up to two industry sector mnemonics from two selection lists. You can display the stocks by these sectors in the results window.

5. **Select Display Characteristics** - see Selecting the Display Characteristics, page 119
   
   You can decide in what order you want the stocks from the search results to be displayed. This could be alphabetically, or sorted by a key datatype.

6. **View Results/Refine Search** - see Viewing the Results/Refine Search, page 119
   
   Equity Search can display up to 1000 stocks and up to 10 datatypes on the results screen. If the number is too big, you can refine your search criteria by clicking the **Refine Search**... button.

7. **Store List** - see Storing the Search Results, page 120
   
   If you are happy with the search results, you can click the **Finish** button to enter your Local List details. You can also choose to upload the list to Datastream, if required.
Starting a Search

Whether you are planning to edit an existing search or create a new search, the Equity Search Project screen is your starting point.

To create a new search:
- Click the New Search... button.

To edit an existing search request:
- Select the required search request in the Project screen and click the Edit Search... button.

In both instances, the Search wizard is displayed.

Defining the Search Universe

The Search wizard provides two ways of searching:
- Country code searching (separate countries or all countries)
- List searching (Datastream constituents or user created lists)

Country code searching

To search through countries, you can select them individually by selecting Countries from the dropdown list, or select all countries by clicking the Search By ALL check box. You can also use composite country codes such as Africa or Europe to search through all countries that belong to these groups. Select the Composite Code option and select a country or region from the drop down list. You can also use a combination of country code and composite country codes, for example EUR-UK for Europe excluding the UK. These can be typed in the Expert Expression field.

Because of the large numbers of equities involved, Datastream has devised a list of useful fast search items to speed up the search. You must use at least one of the fast search items with a limitation when you are searching through markets using the country codes. (Fast search items and limitations are explained in the section that follows.) You can search up to 10 countries on up to 10 datatypes (or through all 48 available countries on up to 10 datatypes using the Search By ALL option).
List searching

You can search through any type of list including market index constituents, industry sector constituents, or your own user created lists. For example you could search through:

- An equity list, such as the Nikkei 500 - JAPA500.
- The Datastream Food Producers industry sector constituents for the USA.
- A Local List that has been uploaded onto Datastream.

To select constituents, use the Filter facility to list the constituent lists by either market or currency, or you can list them by typing in a key letter or phrase in the Find: field. For user created lists, you can click the Refresh grid button to update the list held on Advance.

Note:

For list searching, equity search cannot search more than 2500 equities. A warning message is displayed if more than 2500 equities is exceeded. If this happens, reduce the number of lists used.
The main selection criteria are the search items. You can select up to 10 search items. A search item is made up of a datatype (or account item) and a limitation that you impose upon it. All the following are search items:

**Datatypes and account items**

Datatypes and account items fall into three categories. Choose one according to what you are doing with Equity Search.

- **Fast search items**
  
  These are Datastream datatypes and company account items compiled to help speed up your searches using country codes. When you choose a fast search item, the second and all subsequent items are controlled by the results of the fast search item. When you select a country code or a composite country code for your search environment, you must select at least one fast search item.

- **Extended search items**
  
  There are no restrictions with these search items. They can be used together restricting each other. Each of the ten search items produces results independently of each other. These include equity datatypes, company account items, and expressions.

- **Expressions**
  
  Expressions with a single variable can be used, for example PCH#(X(MV)), which calculates the percentage change of market value for stock X. See Using expressions and functions, page 47 for some examples. Note, if currency conversion is required for the expression, the tilde (~) function must be used in the expression; for example, PCH#(X(MV)~£). Similarly, the units applied are the standard ones used in Advance – market value in millions and volume in thousands.

**Limitations**

This part of the search item is used to restrict the results of the datatype, company account item, or expression selected. For example, a limitation could restrict the search range for a datatype to OVER 100 only.
To search for the top 100 equities, use TOP 100. The maximum limitation for TOP and BOTTOM is 1000. The maximum for OVER, UNDER, and TO is 4 digits. Use the Units dropdown list for large numbers.

Units of value

If the range of values for your search is likely to be high, use the Units dropdown list to keep the displayed number of figures to a readable size. For example a market value of $1,540,000 could be expressed as $1.54 M. The options are: thousands, millions, billions and trillions.

If you do not specify a unit, the output displays the most digits possible for each individual result. Where you have specified a unit, but an individual result is too large, the program displays it in the next highest unit with an indicator of the unit (K, M etc.).

Entering datatypes and limitations

Select the datatypes and limitations that form the basis of your selection criteria in the search wizard, after you have clicked Next>.

- Find and select your datatype, click the Datatype navigation button to use Datastream navigator
  The types of search item available are listed in the Datatype dropdown list. These include Fast and Extended search items for Datastream, I/B/E/ S, MSCI, and Worldscope databases.
- You can specify a Datastream global expression or a user created expression by opening the Expression Picker.
- When you have selected your search item, choose your limitation from the dropdown list, add a value, and define the units.
- When you have selected the search and its limitations, click the Add button to include these details in the search request. Each set of search details you add will be combined using the AND operator to reduce the resulting list of stocks.

Limitation/format Description

| OVER xxx | These options refer to actual datatype values (xxx) which can be 0 to 999999 or 5 numeric characters and a decimal point; for example 125.25. |
| UNDERxxx | These options apply to the fast search items only and refer to the number of stocks to be reported on. xxx can be 1 to 1000 or 1 to 99% (the % limitation applies to each individual market and not a group). |
| xxxTOxxx | These options apply to the fast search items only and refer to the number of stocks to be reported on. xxx can be 1 to 1000 or 1 to 99% (the % limitation applies to each individual market and not a group). |
| TOPxxx | Percentage margin; for example, 10.2. The default is 5.0%. |
| BOTTOMxxx | Percentage margin; for example, 10.2. The default is 5.0%. |

To search for the top 100 equities, use TOP 100. The maximum limitation for TOP and BOTTOM is 1000. The maximum for OVER, UNDER, and TO is 4 digits. Use the Units dropdown list for large numbers.
Selecting Industry Sectors

To further reduce the number of stocks selected, you can select up to two (optional) industry sectors from the third wizard screen:

- Click the Industry Mnemonics tab, and select an industry sector from each list.
- Click the Add button to add the industry sectors to your search criteria list.

Selecting the Display Characteristics

As well as selecting the criteria that determine the stocks and information retrieved, you can also determine how this information is displayed. Currency and sort order options are available from the fourth search wizard, click the Sort Order & Currency tab.

- You can choose to sort your stocks by a key search item in either ascending or descending order OR list them alphabetically. For secondary sorting, you can choose to list them by their industry group sector.
- You can choose any display currency for all the stocks listed irrespective of the countries included in the search.

Currency

You can display the output values in any currency. You select a currency from the Currency dropdown list. If you do not pick a currency, the default currency is displayed for the search item selected.

Sort order

You can specify the order in which the results of the search are displayed. You can rank the equities by:

- Alphabetical order.
- Descending or ascending order of one of the datatypes.

Viewing the Results/Refine Search

After you have entered the selection criteria for your search and have entered any display options, you can run the search by clicking Search Now!. The user interface keeps you informed of any problems with your search criteria, for example 0 Stocks Selected. In instances like this, you can click the Refine Search... button on the empty results screen to go back and change your search criteria.
If your search is successful, the search output screen displays the equities found with the datatypes you requested on the search results screen. The display can show up to 1000 individual stocks (displayed vertically) and up to 10 datatypes (displayed horizontally).

You can decide to refine your search by clicking the Refine Search button or save the list by clicking the Save As List button.

Storing the Search Results

To store the results of the search as a Local List, click the Save As List button on the search results screen to display the final wizard screen. This enables you to:

- Specify the list file. This is the file name of the Local List, which is displayed on the Project screen when the list is created. A default file name is supplied, which you can rename. The file must have the extension .LLT and is saved in the directory specified for lists in Tools>Options>File Locations.
- Type a list description. This is a description that you can use to identify the contents of the Local List displayed. It is displayed in the Project window when the list is created.
- Upload the list onto the Datastream host system for storage and retrieval. This list can be downloaded from Datastream at any time using the Download User Created Lists option from the Local Lists wizard. If you store your search lists on Datastream, the lists will not be refreshed when using the Refresh option on the search Project screen.

If you want the Local List to be updated when you re-run the associated search request, click the Allow Search List & Result to be refreshed check box.

To save the search results as a Local List, EITHER:

- Click the Upload button to upload the list onto Datastream, OR
- Click the Finish button to create the Local List on Advance. This list is associated with the search request and can be refreshed within the search Project screen.
Creating a new search format and Local List

To create a new search format and Local List:

1. Select the Equity Search tab.
2. Click the New Search... button.
   The Search wizard is displayed.
3. Select up to 10 criteria for the search domain from one domain category, this can be:
   • Country – click the Country codes radio button and select a country, or click the Composite Code radio button and select a composite code, e.g., Australasia, from the dropdown list, or click the Expert Expression radio button and type a simple expression, e.g., EEC - UK
   • Constituent – use the Select Filter and Find facilities to select a Constituent List
   • Lists – scroll through the displayed list of user lists and select a list, or enter a list name (e.g. L#FT30) in the entry field provided.
4. Click the Add button after each selection to add the criteria to your search domain.
5. Click Next.
6. Select up to 10 search criteria:
   Click the Datatypes & Limitations tab to specify datatypes and limitations:
   • click the datatype navigation button, select a datatype source from the dropdown list, e.g., Worldscope, and select a datatype from the displayed list.
   Select a type of limitation on the datatype (e.g., OVER) from the Limitations dropdown list
   • type a value that applies to the limitation in the Value field
   • select the units that apply to the value (e.g., millions) from the Units dropdown list
   • click the Add button to add the datatypes and limitations to your search criteria list
   Click on the Industry Mnemonics tab to specify industry sectors:
   • select an industry mnemonic from the 1st list
   • select a second industry mnemonic from the 2nd list
   • click the Add button to add the industry mnemonics to your search criteria list
   Note: You do not need to select all the options available to you. The minimum you need to select is one datatype. As a general rule, the more detailed your search criteria, the fewer number of matches will be found.
7. Select the Sort Order & Currency tab and select your output characteristics:
   • choose a sort order by clicking an appropriate radio button. If you have chosen more than one datatype for your search criteria, both Ascending and
Descending sort options give you a choice of datatype from their dropdown lists; for example, sort in ascending order of market value.

- select a currency from the displayed list. Choosing a currency will display the datatype values in that currency irrespective of the countries included in the search.

8 Click Search Now! The results window is displayed.

9 Either click Refine Search and go back to step 4 to amend your search details, OR click Save As List to save the resulting equities as a Local List.

10 Ensure that the Store Search Results check box is checked, and enter a list file name with the extension .LLT and enter a list description.

11 Either click Upload to transfer the file to Datastream for storage on the host system as a User List, OR click Finish to store your new Local List on your PC.

12 Click Finish.

Your list can be accessed from the Local Lists tab for all your chart, report, and data format requests.
Running an existing search and updating its list

To run an existing search and update its list:

1. Click the Equity Search tab.
   All existing search requests are displayed in the Search Project screen.
2. Search and locate the required search request using the Find: facility.
3. Click the Yes option for the search request under the column Refresh.
4. Click the Refresh Request button on the tool bar to refresh the list.

   During the refresh process, Advance keeps you informed of progress. The message Refreshing Search... is displayed, changing to Retrieving List. When this message disappears, the list is refreshed. The column Last Updated on the Project screen displays today's date for the list you have just refreshed.
Amending a search format

To amend a search format:

1. Click the **Equity Search** tab.
   All existing search requests are displayed in the Search Project screen.
2. Search and locate the required search request using the **Find:** facility.
3. Select the search request and click the **Edit Search...** button. The **Search** wizard
   is displayed with your current search details.
4. Follow steps 4 to 10 in *Creating a new search format and Local List, page 121*
5. Click **Finish** to overwrite the existing details with your amendments,
   OR
   type a new list file name and description, and click **Finish** to create a new Local List.
Using the Web Browser

The Web Browser

The web browser displays the Research Extranet site, Thomson One Analytics, Thomson One Equity, and Thomson Index.

The tool bar contains the following tools:

- **Back**
  Takes you back to the last page displayed

- **Forward**
  Takes you forward towards the current page

- **Cancel**
  Cancels the request

- **AutoPrint**
  Prints each page in the browser at the current time. For example, if you have a report of 10 pages, AutoPrint sends all 10 pages to the printer

- **Home**
  Opens the home page

**Address field**

The web address of the current page is displayed here. You can type another address and press **ENTER** to go to the address of your choice.
Using Thomson One Analytics

In addition to the retrieval of data from Datastream’s own research databases and third party databases such I/B/E/S, MSCI, FT/S&P and Worldscope, Advance provides a link to Thomson’s web-based Thomson One Analytics.

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**Note:**

This requires Microsoft Internet Explorer 4.0 (or later) installed on the PC that is running Advance 4.0 and Adobe Acrobat 3.00 (or later) to view PDF images.

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Configuring Advance to Launch Thomson One Analytics

You must enable the **Browser** option on the **Advance Options** dialog before you can launch Thomson One Analytics within Advance.

**To configure your Thomson One Analytics Connection:**

1. Select **Options** from the **Tools** menu.
2. Select the **Internet** tab.
3. Check the **Web Browser Enabled** check box; this enables Advance to launch your default web browser.
4. Select Thomson One Analytics from the drop down box. The URL is displayed in the **Server URL** field, i.e. [http://www.thomsononeanalytics.com](http://www.thomsononeanalytics.com)
5. Click **OK** to configure your Thomson One Analytics connection.

You can launch Thomson One Analytics from Advance by clicking the link to Thomson Financial sites via browser button and selecting Thomson One Analytics.
Using Thomson One Equity

Thomson One Equity and Datastream Advance

Thomson One Equity provides a personal view of global real-time exchanges and news integrated with premium historical and fundamental market data at a cost-effective price.

Browser-based and accessible via the Internet or through Thomson’s own network, exchange and contributed prices are combined with a wealth of supporting information to provide a portable, integrated and up-to-the-second view of the world’s financial markets.

Sourcing content from such industry leading brands as Datastream, Worldscope and Dow Jones, Thomson One Equity also offers as standard an Excel data transfer facility, 5 years accounts summary, 390 day news archive, 10 year price chart history and over 30 technical studies - all delivered in a clear, customisable and easily navigable front-end.

Datastream Advance's embedded browser supports auto-login and contextual links to Thomson One Equity.

Configuring Advance to launch Thomson One Equity

You must enable the Browser option on the Advance Options dialog before you can launch Thomson One Equity within Advance. You can also select the Thomson One Equity auto login facility on this screen. To use this facility, you must type a valid User Name and Password. Contact your Thomson Customer Support Executive for further details.

To configure your Thomson One Equity Connection:

1 Select Options from the Tools menu.
2 Select the Internet tab.
3 Check the Web Browser Enabled check box; this enables Advance to launch your default web browser.
4 Select Thomson One Equity from the drop down box. The URL is displayed in the Server URL: field, ie http://www.thomsonone.com
5 To use the Thomson One Equity auto login facility, click the Auto Login Enabled check box and type your User Name and Password in the fields provided.
6 Click OK to configure your Thomson One Equity connection.

You can launch Thomson One Equity from Advance by clicking the link to Thomson
Financial sites via browser button and selecting Thomson One Equity.
Making Thomson One Equity requests

To request a Thomson One Equity overview:
1. Select the Overview tab from the type of chart or report tabs.
2. Select the required Thomson One Equity overview from the Overview list.
3. Select a series from the series display grid using the Find field, or the Filter facility.
4. Click Run Now to issue the request.
5. If you have not configured the Auto Login facility, you are now prompted to supply your Thomson One Equity User Name and Password.
6. If your login was successful and the selected series was found on the Thomson One Equity server, the short quote screen for the selected equity is displayed.
7. If Thomson One Equity could not find the requested series, the Advance Code Search dialog is displayed. This dialog enables you to search for the required series by typing the company name. Click Search to display a list of matches. Click on the required company hyperlink to display the report required. This dialog can be accessed from Company Search in the overviews list box.

Thomson One Equity coverage

International exchange and contributed data for a range of financial instruments including:
- Equities and equity derivatives
- Sector and market indices
- Exchange traded derivatives
- Foreign exchange and money markets
- Corporate and government bonds

Data is dynamically updated and can be permissioned for either real-time or delayed (subject to exchange fees).

Real-time and archived international and national news, filtered and categorised for ready retrieval. Standard service includes sources such as Dow Jones and AFX plus a range of regulatory and disclosure wires. Additionally, Thomson One Equity offers access to a number of premium international, national and local-language services.
Using Thomson Index

In addition to the retrieval of data from Datastream’s own research databases and third party databases such I/B/E/S, MSCI, FT/S&P and Worldscope, Advance provides a link to Thomson’s web-based Thomson Index.

Note:
This requires Microsoft Internet Explorer 4.0 (or later) installed on the PC that is running Advance 4.0 and Adobe Acrobat.3.00 (or later) to view PDF images.

Configuring Advance to launch Thomson Index

You must enable the Browser option on the Advance Options dialog before you can launch Thomson Index within Advance.

To configure your Thomson Index Connection:

1. Select Options from the Tools menu.
2. Select the Internet tab.
3. Check the Web Browser Enabled check box; this enables Advance to launch your default web browser.
4. Select Thomson Index from the drop down box. The URL is displayed in the Server URL: field, ie http://product.datstream.com/reports/tis.aspx
5. Click OK to configure your Thomson Index connection.

You can launch Thomson Index from Advance by clicking the link to Thomson Financial sites via browser button and selecting Thomson Index.
Using the Research Extranet

Configuring Advance to launch the Research Extranet

You can access the Research Extranet site in Advance. You can configure Advance to automatically display the site on start up.

To register for extranet access
2. Type the Datastream Logon ID that you use for Advance in the Datastream Logon ID field.
3. Datastream will email you a User Name and Password for the extranet. Please allow 2-3 days.

To access the extranet in Advance:
1. Select Options from the Tools menu. The Advance Options dialog is displayed.
2. Click the Internet tab.
3. Click the Web Browser Enabled check box; this enables Advance to launch your default web browser.
4. Click OK.
5. Click the Research Extranet button on the Advance toolbar. The Enter Network Password dialog is displayed.
6. Type your User Name and Password and click OK.

To display the extranet when you open Advance:
1. Select Options from the Tools menu. The Advance Options dialog is displayed.
2. Click the Internet tab.
3. Click the Show on startup check box in the Extranet Options section.
4. Click OK. The extranet is now shown in the Request window when you open Advance.
Using Settings

Some reports charts and data format requests can be customised with additional data refinements and layout settings. The settings are made on dialogs, displayed when you click the Settings button.

Overview settings

Overview of a company performance

This Overview chart plots the market price of an equity, equity list constituents, or Local Lists, together with its price relative to an index. Settings enables you to select the relative index. The settings facility gives you two options:

- **Select default relative index**
  Datastream selects the relative index. You choose the type (market or sector) and level of default indices (e.g. level 4), and Datastream chooses the actual relative index based upon the series you select.

- **Select a specific relative index**
  You can search through a complete list of Datastream and industry standard indices to select the relative index. Use Navigator to speed up your search.

To specify additional settings:

1. Select an appropriate data category and series.
2. Select the Overview tab.
4. Click the Settings button.
5. Choose one of the following index options:
   - **For a default index**
     - click the Default Index tab
     - click either the market or sector option
     - select the required default market or sector index type
   - **For a specific index**
     - click the Relative Index tab
     - use Navigator to narrow down your search
     - select the required index

6. Click OK.

You can now make your overview request.
Chart settings

Candlestick chart

This chart shows the highest, lowest, opening, and closing prices of a series in a format similar to a bar-chart known as the 'candlestick'. The top of the body of the candlestick is the opening or closing price, whichever is greater. The bottom of the body of the candlestick is the opening or closing price, whichever is less. The body of the candlestick is filled in when the closing price is lower than the opening price, otherwise it is left open. The end points of the central line running through the candlestick, known as the upper and lower shadow, represent the highest and lowest price.

The Candlestick (Keisen) chart is only produced for series where high, low, open, and closing prices are available.

You can:

- Determine the frequency of the price bars. For example, they can represent daily, weekly, monthly, quarterly, or yearly prices.
- Determine the type of plot scale, linear scale or logarithmic scale.

See the Advance Reference guide, Advance Tools Catalogue, page 18, for details on the display period, datatypes and currency adjustments you can make for each data category.

These settings are made on the Candlestick Chart settings dialog.

To specify additional settings for the Candlestick Chart:

1. Select an appropriate data category and series.
2. Select the Chart tab.
3. Select Candlestick Chart from the selection list.
4. Click the Settings button.
5. Select a plotting frequency by dragging the slider to the required frequency.
6. Click either the Linear or Logarithmic option buttons.
7. Click OK to confirm your additional settings.

You can now make your chart request.
Line Chart

This chart plots values for individually selected securities and associated datatypes over a user-defined display period.

See the Advance Reference guide, Advance Tools Catalogue, page 18, for details on the display period, datatypes and currency adjustments you can make for each data category.

You can determine the type of scale plot:

- Linear scale
- Logarithmic scale

These additional settings are made on the Line Chart settings dialog.

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**Note:**

The Frequency option is not available, but is available for Price High/Low/Close, Price and Volume, Candlestick, Trend Analysis Charts and Time Series Data. The Display Options are only available for Time Series Data requests.

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**To specify additional settings for the Line Chart:**

1. Select an appropriate data category and series.
2. Select the Chart tab.
3. Select Line Chart from the selection list.
4. Click the Settings button.
5. Click either the Linear or Logarithmic option buttons.
6. Click OK to confirm your additional settings.
Moving Average Chart 5 - 20 days

The Moving Average 5 – 20 days chart allows you to plot the 5 day and 20 day moving average of a stock or series over a specified period of time. A moving average line plot is produced by calculating the average over a 5 and 20 day period over the display period you select.

You can determine the type of scale plot:

- Linear scale
- Logarithmic scale

**Note:**

The Frequency option is not available, but is available for Price High/Low/Close, Price and Volume, Candlestick, Trend Analysis Charts and Time Series Data. The Display Options are only available for Time Series Data requests.

To specify additional settings for the Percentage Changes Chart:

1. Select the data category and series.
2. Select the Chart tab.
3. Select **Moving Average Chart 5 – 20 days** from the selection list.
4. Click the Settings button.
5. Click either the Linear or Logarithmic option buttons.
6. Click OK to confirm your additional settings.
Moving Average Chart - Configurable

This chart plots a security, series, or expression together with up to two moving averages and an optional momentum chart. This chart is similar to the Moving Average Chart (5 and 20) except you can specify any value and frequency for the two moving averages. You can also specify:

- Y axis based upon logarithmic or linear scale
- Momentum can be based on either the difference or ratio of two defined moving averages.

The Moving Average Chart - Configurable can be produced for all data categories except Economic reports/charts.

When selecting the moving average period frequency, you must match the plot frequency with the frequency of data you are plotting. For example, company accounts data must be plotted in multiples of years as the data is collected on a yearly basis.

The displayed plotting frequency is determined by the chosen display period, which is daily up to two years, weekly between two and 10 years, and monthly over 10 years. For example, a moving average period frequency of 91 days for a display period over two years will be converted into an equivalent period of 18 weeks.

All settings are made on the Moving Average Chart - Configurable settings dialog.

To select additional settings:

1. Select a data category and series.
2. Click the Chart tab.
3. Select Moving Average Chart - Configurable from the selection list.
4. Click the Settings button.
5. Type a value and select a frequency for the first moving average period.
6. Type a value and select a frequency for the second moving average period, if required.
7. Select the Y Scale Linear or Y Scale Logarithmic option.
8. Select a momentum option (Ratio or Difference) or the Suppress momentum option.
9. Click OK to save your chart settings.

You can now issue your chart request with your additional settings.
PE Bands Chart

The PE Bands Chart is used to compare a share price, price index or investment trust with a fundamental datatype, such as its earnings per share over time. The chart plots the historical price overlaid with bands, which are multiples of the selected series and/or datatype. Typically multiples are entered so that the top band passes through the high price and the bottom band passes through the low price.

You select the series for the historical price plot and display period on the main Request screen. Settings lets you to make the following additional settings:

- Series and/or datatype for the PE bands. For datatypes, you can choose from Datastream, I/B/E/S, MSCI and Datastream company accounts datatypes
- Up to 6 PE bands with user specified multiples for each band
- Plot frequencies for both series/datatype and PE bands
- User defined Y axis range
- Choose from three grid styles
- Optional Volume chart can be produced in addition to PE Bands Chart

These additional settings are made on the PE Bands Chart dialog. If settings are not made, default values are assumed.

To specify additional settings for the PE Bands Chart:

1. Select an equity, index or constituent series.
2. Select the PE Bands Chart from the Chart tab.
3. Select a display period for the chart.
4. Click the Settings button.
5. Select the datatype or series and datatype for the bands:
   - For series and datatype selection:
     - select the Series tab
     - search for a series using Navigator
     - click a series to select it, the name appears in the Series display field
     - search for a datatype using Navigator
     - click a datatype to select it, the name appears in the Datatype display field
6. Select a series plot frequency by moving the Series Frequency slider.
7. Select a band plot by moving the Band Frequency slider.
8. Select the Multiples tab.
9. Select the number of bands required by using Number of Bands spin buttons.
10 For each band, type the multiple number in each band field. Use the TAB key to move the cursor from field to field.

11 Choose either a Linear or Logarithmic scale for the line plot by clicking the appropriate radio button.

12 Type the From and To scale ranges for the Y axis, if required. If left blank, an appropriate scale is automatically assigned.

13 Select a grid style by clicking the style button, if required.

14 Click the Volume Chart Required check box, if the additional chart is required.

15 Click OK.

These settings remain in use for each request you issue until they are changed. You can have different settings for each PE Band Chart request you issue.
Percentage Changes Chart

The Percentage Changes Chart lets you to plot the percentage change of a stock or series over a specified period of time. A percentage change line plot is produced by comparing the price/value of a series now with the price/value \( n \) days or months ago, and then rolled back over the display period you select. The \( n \) value is set to a year and the plotting frequency, printed in the title, is determined by Datastream.

See the Advance Reference guide, Advance Tools Catalogue, page 18, for details on the display period, datatypes and currency adjustments you can make for each data category.

By clicking the Settings button, you can determine the type of scale plot:

- Linear scale
- Logarithmic scale

These additional settings are made on the Percentage Change Chart settings dialog.

**Note:**

The Frequency option is not available, but is available for Price High/Low/Close, Price and Volume, Candlestick, Trend Analysis Charts and Time Series Data. The Display Options are only available for Time Series Data requests.

**To specify additional settings for the Percentage Changes Chart:**

1. Select an appropriate data category and series.
2. Select the Chart tab.
3. Select Percentage Changes Chart from the selection list.
4. Click the Settings button.
5. Click either the Linear or Logarithmic option.
6. Click OK to confirm your additional settings.
Point & Figure Chart

This chart plots the price rise and fall for a selected series and date range. Unlike most price charts, the Point and Figure chart abandons the use of the X axis for plotting the passage of time and plots price change on both the Y and X axis.

Point and Figure charts display an X when prices rise by the box size, and display an O when prices fall by the box size. Each column contains either Xs or Os but never both. For a price to change column, for example an X column to an O column, the price must reverse by the reversal amount multiplied by the box size. The box size and the reversal amount are both displayed on the chart.

You can:

- Type a title
- Select the number and size of the boxes

These settings are made on the **Point &Figure Chart** settings dialog.

**To specify additional settings for the Point &Figure Chart:**

1. Select an appropriate data category and series.
2. Select the **Chart** tab.
3. Select **Point &Figure Chart** from the selection list.
4. Click the **Settings** button.
5. Type a title in the **Chart Title** field.
6. Select the **Number of boxes for a Reversal**.
7. Select the **Size of Boxes**.
8. Click **OK** to confirm your additional settings.

You can now make your chart request.
Price High/Low/Close Chart

The Price High/Low/Close Chart allows you to produce price bars, showing the highest, lowest and closing prices, for a selected series over a user defined display period. **Settings** lets you:

- Determine how often the price bars are plotted, for example they can represent daily, weekly, monthly, quarterly or yearly prices.
- Change the type of plot scale used from a linear scale to a logarithmic scale

See the *Advance Reference guide, Advance Tools Catalogue, page 18*, for details on the display period, datatypes and currency adjustments you can make for each data category.

These additional settings are made on the **Price High/Low/Close Chart** settings screen:

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**Note:**

*The Display Options are only available for Time Series Data requests.*

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**To specify additional settings for the Price High/Low/Close Chart:**

1. Select an appropriate data category and series.
2. Select the **Chart** tab.
3. Select **Price High/Low/Close Chart** from the selection list.
4. Click the **Settings** button.
5. Choose a plotting frequency by dragging the slider to select the required frequency.
6. Click on either the **Linear** or **Logarithmic** radio buttons.
7. Click **OK** to confirm your additional settings.

You can now issue your chart request.
Price & Index Relative Chart

The Price and Index Relative chart is a composite graph showing price performance details for a selected equity series, constituent list, or Local List on two charts. The first chart is a simple line chart plotting the price of the selected equity over a user specified display period. The second chart plots the series price divided by a default price index rebased to an opening index value of 100. A line is drawn across the chart at 100 to aid interpretation.

The settings facility gives you two options for selecting Y.

- **Select default index**
  
  This option allows you to leave the decision on what relative index to use to Datastream. You choose the type (market or sector) and level of default indices (e.g. level 4), and Datastream chooses the actual relative index based upon the series you select.

- **Select a specific relative index**
  
  You can search through a complete list of Datastream and industry standard indices to select the relative index. Navigator is located on the settings screen to help you speed up your search through the series database.

**To specify additional settings:**

1. Select an appropriate data category and series.
2. Select the Chart tab.
3. Select the Price & Index Relative Chart.
4. Click the Settings button.
5. Choose one of the following index options:
   - **For an individual index**
     - click the Relative Index tab
     - use Navigator to find your series
     - select the required indices
   - **For a default index**
     - click the Default Index tab
     - click either the Market or Sector option
     - select the required default market or sector index type
6. Choose either the Linear or Logarithmic scale for the Y axis by clicking the appropriate option.
7. Click OK to save your chart settings.

You can now make your chart request.
Price and Price Relative Chart

This Price and Price Relative chart plots the market price of an equity (or equity list constituents), unit trust or investment trust together with its price relative to an index. It can also be used to compare an equity against another market index. **Settings** enables you to select the index that will form the Y element in the following equation:

\[ \frac{X}{Y} \times 100 \]

where \( X \) can be an equity price or price index. **Settings** gives you two options for selecting \( Y \).

- **Select a specific relative index**
  You can search through a complete list of Datastream and industry standard indices to select the relative index. Navigator is located on the settings screen to help you find your series.

- **Select default index**
  This option allows you to leave the decision on what relative index to use to Datastream. You choose the type (market or sector) and level of default indices (e.g. level 4), and Datastream chooses the actual relative index based upon the series you select.

**To specify additional settings:**

1. Select an appropriate data category and series.
2. Select the **Chart** tab.
3. Select the **Price and Price Relative Chart**.
4. Click the **Settings** button.
5. Choose one of the following index options:
   - For an individual index:
     - Click the **Relative Index** tab
     - Use **Navigator** to find your index
     - Select the required indices
   - For a default index
     - Click the **Default Index** tab
     - Click either the **Market** or **Sector** options
     - Select the required default market or sector index type
6. Choose either the **Linear** or **Logarithmic** scale for the Y axis by clicking the appropriate option button (not available for Performance over 1, 3 and 12 months report).
7. Click **OK** to save your chart settings.

You can now issue your chart request with your additional settings.
Price & Volume Chart

This composite graph displays two charts; a line chart plotting the price of a selected equity, or Local List, over a user-defined display period, and a separate bar chart showing the volume of trade for the same equity within the same display period.

You can:

- Determine the frequency of the price bars. For example, they can represent daily, weekly, monthly, quarterly, or yearly prices.
- Determine the type of plot scale, linear scale or logarithmic scale

See the Advance Reference guide, Advance Tools Catalogue, page 18, for details on the display period, datatypes and currency adjustments you can make for each data category.

These settings are made on the Price & Volume settings dialog.

To specify additional settings for the Price & Volume Chart:

1. Select an appropriate data category and series.
2. Select the Chart tab.
3. Select Price & Volume Chart from the selection list.
4. Click the Settings button.
5. Select a plotting frequency by dragging the slider to the required frequency.
6. Click either the Linear or Logarithmic option buttons.
7. Click OK to confirm your additional settings.

You can now make your chart request.
Reversal Chart

This chart shows a reversal diagram for a selected series and date range. A reversal diagram shows the same information as a Point and Figure Chart, but with the information presented more concisely.

Reversal diagrams are plotted without an X axis time scale, but show:
- A price rise represented by a vertical line with a bar on top
- A price fall represented by a vertical line with a bar at the bottom

You can:
- Determine the frequency of the chart. For example, daily, weekly, monthly, quarterly, or yearly
- Determine the type of plot scale, linear scale or logarithmic scale

See the Advance Reference guide, Advance Tools Catalogue, page 18, for details on the display period, datatypes and currency adjustments you can make for each data category.

These settings are made on the Reversal Chart settings dialog.

To specify additional settings for the Reversal Chart:

1. Select an appropriate data category and series.
2. Select the Chart tab.
3. Select Reversal Chart from the selection list.
4. Click the Settings button.
5. Select a plotting frequency by dragging the slider to the required frequency.
6. Click either the Linear or Logarithmic option buttons.
7. Click OK to confirm your additional settings.

You can now make your chart request.
Trend Analysis Chart

This chart generates a forecast of the future performance of a series based upon past results. The chart plots the values of the selected series as a simple line chart and calculates an additional 'least squares' trend line. The coefficients for the trend line are calculated such that the A coefficient is the value of the series at the start date, and the B coefficient is the series value for each time period (i.e. frequency).

You can:

- Determine the frequency of the chart. For example, daily, weekly, monthly, quarterly, or yearly.
- Determine the type of plot scale, linear scale or logarithmic scale.

See the Advance Reference guide, Advance Tools Catalogue, page 18, for details on the display period, datatypes and currency adjustments you can make for each data category.

These settings are made on the Trend Analysis Chart settings dialog.

To specify additional settings for the Trend Analysis Chart:

1. Select an appropriate data category and series.
2. Select the Chart tab.
3. Select Trend Analysis Chart from the selection list.
4. Click the Settings button.
5. Select a plotting frequency by dragging the slider to the required frequency.
6. Click either the Linear or Logarithmic option.
7. Click OK to confirm your additional settings.

You can now make your chart request.
Report settings

Actual Values (104) from start date Report

This report displays up to 104 daily, weekly, monthly, quarterly, or yearly price values for a selected Datastream series in a calendar format. The highest and lowest price values of the reporting period are displayed at the top of the report with their dates.

You can:

- Determine the frequency of the values. For example, they can represent daily, weekly, monthly, quarterly, or yearly prices.

See the Advance Reference guide, Advance Tools Catalogue, page 18, for details on the display period, datatypes, and currency adjustments you can make for each data category.

These settings are made on the Actual Values (104) from start date settings dialog.

To specify additional settings for the Actual Values (104) from start date report:

1. Select an appropriate data category and series.
2. Select the Report tab.
3. Select Actual Values (104) from start date report from the selection list.
4. Click the Settings button.
5. Select a plotting frequency by dragging the slider to the required frequency.
6. Click OK to confirm your additional settings.

You can now make your report request.
Balance sheet report

This reports displays company balance details for a selected equity series, over the last five years. Balances for all major company accounts are displayed which include income accounts, operating profit accounts, cost and expenditure accounts, taxation accounts, after tax profit accounts and employment accounts. Balances are grouped according to account type and are displayed with account number and description.

You can:
- Choose to display data as:
  - Actual values
  - Index numbers
  - Percentage change
  - Per share
- Select the detail level, Detail or Key Items
- Select the Index base year, or relative period

To specify additional settings for the Balance Sheet report:
1. Select an appropriate data category and series.
2. Select the Report tab.
3. Select Balance Sheet report from the selection list.
4. Click the Settings button.
5. Select a display option from the Display Option drop down box.
6. Select the detail level from the Detail Level options.
7. Select the index base year, or relative period.
8. Click OK to confirm your additional settings.

You can now make your report request.
Capital Issues & Changes report

This report displays a diary of capital events (issues, deletions, consolidations, etc.) which directly affect shareholder’s holdings of security. The report specifically gives details on the issue of new securities and the replacement of existing shareholders’ holdings with different securities.

Each diary event is listed in ascending date order with a description of the event type, details of the issue or replacement terms and the dates upon which the shareholder is affected. Data is added to the diary as it is received which may result in temporary incomplete details. Cancelled events are marked as deletions and are held on the diary for at least 24 hours before final removal.

You can:

- Select up to 5 types of issue or changes
- Select an event date
- Select an amendment date

To specify additional settings for the Capital Issues & Changes report:

1. Select an appropriate data category and series.
2. Select the Report tab.
4. Click the Settings button.
5. Select up to 5 types of issue or change from the Types of Issue/Change list.
6. Click the Add button to add them to the Selected Issue/Change list.
7. Click the Ex/Event Date: check box to add an event date
8. Click the Amendment date: check box to add an amendment date.
9. Click OK to confirm your additional settings.

You can now make your report request.
Cash Flow Statement Report

This report displays a cash flow statement for a selected equity series. The report shows subtotals of cash flow movements due to adjustments, investing and financing activities, change in working capital and return on investments, for each year where data is available. Subtotals for cash flow accounts are grouped by account type and are displayed with their account number and description.

You can:

- Choose to display data as:
  - Actual values
  - Index numbers
  - Percentage change
  - Per share
- Select the detail level, Detail or Key Items
- Select the Index base year, or relative period

To specify additional settings for the Cash Flow Statement report:

1. Select an appropriate data category and series.
2. Select the Report tab.
4. Click the Settings button.
5. Select a display option from the Display Option drop down box.
6. Select the detail level from the Detail Level options.
7. Select the index base year, or relative period.
8. Click OK to confirm your additional settings.

You can now make your report request.
Performance Over 1, 3 and 12 Months Report

The Performance Over 1, 3 and 12 Months report displays the price on the selected date and the % change over the previous month, three months and 12 months for an equity series, index, unit trust, investment trust, or a list of these. The constituents of a list are displayed in ascending alphabetical order.

Settings enables you to choose one of three additional display options:

- Display the % gains/loss relative to a specific index that you select. This data is displayed under three additional columns (one for each % change period) labelled %GAINS/LOSS ON INDEX. You can search through a complete list of Datastream and industry standard indices to select the relative index. Use Navigator to find your index.

- Display the % gains/loss relative to a default index type that you select. This data, again, is displayed under three additional columns labelled %GAINS/LOSS ON INDEX. This option allows you to leave the decision on what relative index to use to Datastream. You choose the type (market or sector) and level of default indices (e.g. level 4), and Datastream chooses the actual relative index based upon the list you select.

- Turn off the relative/default index display.
  This option enables you to switch off the three additional (optional) columns %GAINS/LOSS.

The Settings facility provides one further option which enables you to change the three default % change periods (1, 3 and 12 months) to any three periods within a two year period. For example you could change the three periods to 6 months, 1 year and 18 months. These changes are made on the Periods tab, the Index Selection screen.

To specify additional settings:

1. Select an appropriate data category and list.
2. Select the Report tab.
3. Select the Performance Over 1, 3 and 12 Months report.
4. Click the Settings button. The Index Selection screen is displayed.
5. Choose one of the following three index options:
   - For a specific index
     - ensure the Ignore Index check box is unchecked
     - click the Relative Index tab
     - click the Series navigation button to use Navigator to find your index
   - For a default index
     - ensure the Ignore Index check box is unchecked
     - click the Default Index tab
     - click either the Market or Sector option
     - select the required default market or sector index type
• To turn off the relative index column
  - click the Ignore Index check box

6 Click the Period tab and change the default periods, if required,
  • use the Period Type dropdown list to select the type of period (day, month and so on)
  • use the Period up and down buttons to set three new default percentage change periods (the Default button returns your new settings back to their defaults periods).

7 Click OK to save your report settings

You can now issue your report request with your additional settings.
Performance Over 1, 3 and 12 Months Report

The Performance Over 1, 3 and 12 Months report displays the price on the selected date and the % change over the previous month, three months and 12 months for an equity series, index, unit trust, investment trust, or a list of these. The constituents of a list are displayed in ascending alphabetical order.

Settings enables you to choose one of three additional display options:

- Display the % gains/loss relative to a specific index that you select. This data is displayed under three additional columns (one for each % change period) labelled %GAINS/LOSS ON INDEX. You can search through a complete list of Datastream and industry standard indices to select the relative index. Use Navigator to find your index.

- Display the % gains/loss relative to a default index type that you select. This data, again, is displayed under three additional columns labelled %GAINS/LOSS ON INDEX. This option allows you to leave the decision on what relative index to use to Datastream. You choose the type (market or sector) and level of default indices (e.g. level 4), and Datastream chooses the actual relative index based upon the list you select.

- Turn off the relative/default index display. This option enables you to switch off the three additional (optional) columns %GAINS/LOSS.

The Settings facility provides one further option which enables you to change the three default % change periods (1, 3 and 12 months) to any three periods within a two year period. For example you could change the three periods to 6 months, 1 year and 18 months. These changes are made on the Periods tab, the Index Selection screen.

To specify additional settings:

1. Select an appropriate data category and list.
2. Select the Report tab.
3. Select the Performance Over 1, 3 and 12 Months report.
4. Click the Settings button. The Index Selection screen is displayed.
5. Choose one of the following three index options:
   - For a specific index
     - ensure the Ignore Index check box is unchecked
     - click the Relative Index tab
     - click the Series navigation button to use Navigator to find your index
   - For a default index
     - ensure the Ignore Index check box is unchecked
     - click the Default Index tab
     - click either the Market or Sector option
     - select the required default market or sector index type
• To turn off the relative index column
  - click the Ignore Index check box

6 Click the Period tab and change the default periods, if required,
  • use the Period Type dropdown list to select the type of period (day, month
    and so on)
  • use the Period up and down buttons to set three new default percentage
    change periods (the Default button returns your new settings back to their
    defaults periods).

7 Click OK to save your report settings

You can now issue your report request with your additional settings.
Performance Over 1, 3 and 12 Months Report - today

The Performance Over 1, 3 and 12 Months - today report displays the price on the selected date and the % change over the previous month, three months and 12 months, from today’s date, for an equity series, index, User created index, unit trust, investment trust, or a list of these. The constituents of a list are displayed in ascending alphabetical order.

Settings enables you to choose one of three additional display options:

- Display the % gains/loss relative to a specific index that you select. This data is displayed under three additional columns (one for each % change period) labelled %GAINS/LOSS ON INDEX. You can search through a complete list of Datastream and industry standard indices to select the relative index. Use Navigator to find your index.

- Display the % gains/loss relative to a default index type that you select. This data, again, is displayed under three additional columns labelled %GAINS/LOSS ON INDEX. This option allows you to leave the decision on what relative index to use to Datastream. You choose the type (market or sector) and level of default indices (e.g. level 4), and Datastream chooses the actual relative index based upon the list you select.

- Turn off the relative/default index display.
  This option enables you to switch off the three additional (optional) columns %GAINS/LOSS.

To specify additional settings:

1. Select an appropriate data category and list.
2. Select the Report tab.
3. Select the Performance Over 1, 3 and 12 Months report - today.
4. Click the Settings button. The Index Selection screen is displayed.
5. Choose one of the following three index options:
   - For a specific index
     - ensure the Ignore Index check box is unchecked
     - click the Relative Index tab
     - click the Series navigation button to use Navigator to find your index
   - For a default index
     - ensure the Ignore Index check box is unchecked
     - click the Default Index tab
     - click either the Market or Sector option
     - select the required default market or sector index type
   - To turn off the relative index column
     - click the Ignore Index check box
6 Click **OK** to save your report settings

You can now issue your report request with your additional settings.
Performance Over 1, 3 and 12 Months Report - fixed end date

The Performance Over 1, 3 and 12 Months - fixed end date report displays the price on the selected date and the % change over the previous month, three months and 12 months for an equity series, index, user created index, unit trust, investment trust, or a list of these. The constituents of a list are displayed in ascending alphabetical order.

**Settings** enables you to choose one of three additional display options:

- Display the % gains/loss relative to a specific index that you select. This data is displayed under three additional columns (one for each % change period) labelled %GAINS/LOSS ON INDEX. You can search through a complete list of Datastream and industry standard indices to select the relative index. Use Navigator to find your index.

- Display the % gains/loss relative to a default index type that you select. This data, again, is displayed under three additional columns labelled %GAINS/LOSS ON INDEX. This option allows you to leave the decision on what relative index to use to Datastream. You choose the type (market or sector) and level of default indices (e.g. level 4), and Datastream chooses the actual relative index based upon the list you select.

- Turn off the relative/default index display.
  This option enables you to switch off the three additional (optional) columns %GAINS/LOSS.

The **Settings** facility provides one further option which enables you to change the three default % change periods (1, 3 and 12 months) to any three periods within a two year period. For example you could change the three periods to 6 months, 1 year and 18 months. These changes are made on the **Periods** tab, the **Index Selection** screen.

To specify additional settings:

1. Select an appropriate data category and list.
2. Select the **Report** tab.
3. Select the Performance Over 1, 3 and 12 Months report - fixed end date.
4. Click the **Settings** button. The **Index Selection** screen is displayed.
5. Choose one of the following three index options:
   - For a specific index
     - ensure the **Ignore Index** check box is unchecked
     - click the **Relative Index** tab
     - click the **Series navigation** button to use **Navigator** to find your index
   - For a default index
     - ensure the **Ignore Index** check box is unchecked
     - click the **Default Index** tab
     - click either the **Market** or **Sector** option
     - select the required default market or sector index type
• To turn off the relative index column
  - click the **Ignore Index** check box

6 Click the **Period** tab and change the default periods, if required,
  • use the **Period Type** dropdown list to select the type of period (day, month and so on)
  • use the **Period** up and down buttons to set three new default percentage change periods (the Default button returns your new settings back to their defaults periods).

7 Click **OK** to save your report settings

You can now issue your report request with your additional settings.
Performance Range & Average Report

This report displays start and end values, percentage change, high and low values with dates, and an average value for a Datastream series or list of series over a user defined time period. You can specify a datatype from those available or generate the report using the default datatype for the data category selected. You can produce the same results for an expression by using the Performance, range & average using expression report.

You can:

- Select a datatype or expression
- Select a second display date

To specify additional settings for the Performance Range & Average, using Expressions, report:

1. Select an appropriate data category and series.
2. Select the Report tab.
3. Select Performance Range & Average, using Expressions, report from the selection list.
4. Click the Settings button.
5. Select either the
   - Use Datatype as the Expression option,
   - Use an expression option
4. Select a second display date from the Second display Date boxes.
7. Click OK to confirm your additional settings.

You can now make your report request.
Performance Range & Average, using Expressions, Report

This report displays start and end values, percentage change, high and low values with dates, and an average value for a Datastream expression over a user defined time period. You can produce the same results for a Datastream series or list of series by using the Performance, range & average report.

You can:

☑ Select a datatype or expression

To specify additional settings for the Performance Range & Average, using Expressions, report:

1 Select an appropriate data category and series.
2 Select the Report tab.
3 Select Performance Range & Average, using Expressions, report from the selection list.
4 Click the Settings button.
5 Select either the
   - Use a datatype as the Expression option.
     Select a recent Datatype from the drop down box or use Navigator to find your datatype.
   OR
   - Use an expression option.
     Click the Expressions button and select an expression from the Expression picker.
6 Click OK to confirm your additional settings.

You can now make your report request.
Profit and Loss Report

This report shows profit and loss account information for a selected company, where data has been published. The report shows balances for key Profit & Loss accounts including trading income accounts, costs and expenditure accounts, operating and non-operating profit accounts. Profit & Loss values are grouped by account type and are displayed with their account number and description.

You can:

- Choose to display data as:
  - Actual values
  - Index numbers
  - Percentage change
  - Per share

- Select the detail level, Detail or Key Items
- Select the Index base year, or relative period
- Include revenue account

To specify additional settings for the Profit and Loss report:

1. Select an appropriate data category and series.
2. Select the Report tab.
3. Select Profit and Loss report from the selection list.
4. Click the Settings button.
5. Select a display option from the Display Option drop down box.
6. Select the detail level from the Detail Level options.
7. Select the index base year, or relative period.
8. Click OK to confirm your additional settings.

You can now make your report request.
Values over time and % changes for Economics

You can:

- Select monthly, quarterly, or annual frequency
- Select the start and end dates

To specify additional settings for the Values over time and % changes for Economics:

1. Select an appropriate data category and series.
2. Select the Comparisons tab.
3. Select Values over time and % changes for Economics from the selection list.
4. Click the Settings button.
5. Select a frequency option.
6. Select the Start and End periods.
7. Click OK to confirm your additional settings.

You can now make your report request.
Data settings

Company Accounts Data

You can download company accounts data for a selected equity series and user defined display period. Company accounts data requests can only be issued for Equities and Constituents and Local Lists that contain only equity series.

You can define the type and format of the company accounts data you download from Datastream. Click the Settings button to display the Company Accounts Data dialog.

You can choose from Global or User created company accounts formats.

Global company accounts formats

- **Formats**: Select a format from the list.
- **Expert** If you have previously created a company accounts format on Datastream, you can type the code in the Expert field and download the data directly.

User company accounts formats

- **Formats**: Select a format from the list
- **Create...** You can create a new list
- **Amend...** You can amend an existing format
- **Refresh list** You can refresh the list displayed

Annualise

- **Annualise** Click this check box to adjust the company accounts over the display period to give you annualised data.
  This is for companies who have moved their year end dates, say from end of year to mid year.

To download Company Accounts Data with a Global format:

1. Select an appropriate data category and series.
2. Select the Data for a single series tab.
3. Select Company Accounts Data from the selection list.
4. Click the Settings button.
5. Select Global company accounts formats
6 Select a format from the list displayed
   OR
   Type your request code in the **Expert** field.
7 Click the **Annualise** check box, if you want annualisation.
8 Click **OK**.

To download Company accounts data with a User created format:
1 Select an appropriate data category and series.
2 Select the **Data for a single series** tab.
3 Select **Company Accounts Data** from the selection list.
4 Click the **Settings** button.
5 Select **User created company accounts formats**
6 Select a format from the list displayed
   OR
   Click the **Create** button to create a new format
   OR
   Click the **Amend** button to amend an existing format
7 Click the **Annualise** check box, if you want annualisation.
8 Click **OK**.
Static Data

Static data requests download values for a selected series at a particular point in time. **Settings** lets you to define the data you download from Datastream and determine how it is labelled. Using **Settings**, you can select up to 9 datatypes.

**Note:**

*The datatype NAME is added as the first datatype for each request. NAME provides the title of the data series.*

The type of datatype you can select is dependent upon the data category chosen. For equities, for example, you can select from Datastream, I/B/E/S and MSCI datatypes, and Worldscope, and Datastream Company accounts data items.

Use the dropdown list at the top of the **Static Data** dialog to select the datatype source.

The **Expression Picker** and **Expression Builder** facilities are located on this dialog, if you want to create or use an existing expression as part of the static data request. See About Expressions and Functions, page 47.

**To specify additional settings for Static Data:**

1. Select an appropriate Data category and Series.
2. Select either the **Data** or **Comparison** tab.
3. Select **Static Data** from the selection list.
4. Click the **Settings** button.
5. Use **Navigator** to select your datatypes. Select up to 9 datatypes.  
   **Note:** The currency field is disabled if the datatype is not currency convertible.
6. Click the **Remember Datatypes** check box to store your datatype selections for use with **Flexible Report** requests. As the **Flexible Report** uses up to five datatypes, only the first five datatypes selected for Static Data requests are stored.
7. Click the **Display Options** you want: Titles, Column Headings, Row Headings, and Currency.
8. If your static data request is for a Local List, click the **Retain List** check box. The list of datatypes for your request will be retained on the host system so you can embed the data request in Excel.
9. Click **OK** to confirm your additional settings.

You can now issue your data request with your additional settings.
Time Series Data

The settings available for time series data requests enable you to specify the frequency of reported data for the time period selected. The default is daily, however you can change this to Weekly, Monthly, Quarterly and Yearly. There is no restriction on the amount of data you can display except for a limit of 16,384 rows in the display area. So for example, you could display over 10 years worth of daily data.

In addition to the settings for data frequency, you can also select a number of display options which include:

- **Titles** - general headings for row and column titles, for example CODE for series and datatype mnemonics.
- **Column headings** - the datatype mnemonic at the top of each column
- **Row headings** - the series mnemonic at the head of each row for each series selected
- **Currency** - display an additional column with the title CURRENCY and with the traded currency for each selected series.

The selections are made on the **Time Series Data** settings screen:

The Lin/Log settings are not available for time series data requests.

To use the Time Series Data settings:

1. Select an appropriate data category and series.
2. Select the **Data** tab.
3. Select **Time Series Data** from the selection list.
4. Click the **Settings** button. The **Time Series Data settings** dialog is displayed.
5. Choose the data **Frequency** by dragging the slider to select the required frequency.
6. Select the **Display Options** by clicking the required check boxes.
7. Click **OK**.
Summary settings

Bar chart: flexible

This chart is similar in use to the Flexible Report in that it can display data for up to five individually selected datatypes, however the results are displayed as horizontal bars. The chart is particularly useful for comparing datatypes for a list of series, for example in an industry sector (i.e. Datastream Constituent list) or a portfolio (i.e. Local List). The DSWindows equivalent tool is 401W.

Values for up to five datatypes can be displayed for each series in a list up to a maximum of 60 bars. Datatypes are selected on the tool's **Settings** dialog, which enable you to:

- Select up to 5 datatypes (including Datastream, I/B/E/S, MSCI datatypes)
- Use datatypes already selected with the Flexible Report and Static Data request’s Remember Datatypes facility.
- Type your own chart title and legends for the datatypes selected or use the Datastream’s default datatype names.
- Sort the results alphabetically in ascending/descending order or on a key datatype.
- Override the default X axis scale range by typing from and to ranges.

The Expression Picker and Expression Builder facilities are located on this screen, if you want to create or use an existing expression as part of the bar chart request. See **Expressions and Functions**, page 47 for further details.

To issue a Bar Chart: Flexible request:

1. On the Request screen, select a Local List or a Constituent list from the category drop down box.
2. Click the **Summary** tab.
3. Click the **Bar Chart: Flexible** tool.
4. Click the **Data Selection** button and select a **Fixed** or **Relative** End Date or select **Today**.
5. Click **Settings**. The settings dialog for the Bar Chart: Flexible tool is displayed.
6. Use Navigator to select your datatypes.
7 Select up to 5 individual datatypes from Datastream, I/B/E/S, Worldscope, MSCI and Datastream Company Accounts datatype sources. Use Navigator to select your datatypes. Click the Remember Datatypes check box to store your datatype selections for use with Static Data and Flexible Report requests.

8 Click on the Sort Order & Axis tab

9 Type a chart title in field Chart Title: if required.

10 Overtype the default legend titles with your own legend titles, if required.

11 Set the X axis From and To range, if required.

12 Increase the default number of displayed bars from 30, if required.

13 Click the Grid Required check box to display the optional grid, if required.

14 Select the required sort order by clicking the Order by List, Order Alphabetically or Order by Datatype options. If you select Order by Datatype, you can select the datatype from the adjacent picklist and optionally select to display those values in ascending order.

15 Click OK to save your settings and close the settings dialog.

16 Click Run Now to issue the Bar Chart: Flexible request.
Company Accounts Data

You can download company accounts data for a selected equity series and user defined display period. Company accounts data requests can only be issued for Equities and Constituents and Local Lists that contain only equity series.

You can define the type and format of the company accounts data you download from Datastream. Click the **Settings** button to display the **Company Accounts Data** dialog.

You can choose from Global or User created company accounts formats.

**Global company accounts formats**

- Formats: Select a format from the list.
- Expert If you have previously created a company accounts format on Datastream, you can type the code in the **Expert** field and download the data directly.

**User company accounts formats**

- Formats: Select a format from the list
- Create... You can create a new list
- Amend... You can amend an existing format
- Refresh list You can refresh the list displayed

**Annualise**

- Click this check box to adjust the company accounts over the display period to give you annualised data.
  This is for companies who have moved their year end dates, say from end of year to mid year.

**To download Company Accounts Data with a Global format:**

1. Select an appropriate data category and series.
2. Select the **Data for a single series** tab.
3. Select **Company Accounts Data** from the selection list.
4. Click the **Settings** button.
5. Select **Global company accounts** formats
6. Select a format from the list displayed OR
   Type your request code in the **Expert** field.
7. Click the **Annualise** check box, if you want annualisation.
8. Click **OK**.
To download Company accounts data with a User created format:

1. Select an appropriate data category and series.
2. Select the **Data for a single series** tab.
3. Select **Company Accounts Data** from the selection list.
4. Click the **Settings** button.
5. Select **User created company accounts** formats.
6. Select a format from the list displayed
   OR
   Click the **Create** button to create a new format
   OR
   Click the **Amend** button to amend an existing format
7. Click the **Annualise** check box, if you want annualisation.
8. Click **OK**.
Flexible Report

The Flexible Report provides details on datatypes from over 3,500 Datastream and industry constituent lists, such as key world business sectors and benchmarks. The Settings dialog lets you select up to 5 datatypes for the report, which can be from Datastream, I/B/E/S and MSCI datatypes, Worldscope, and Datastream Company accounts data items.

In addition to the datatype selections you can make, you can also:

- Store your datatype selections for use with the Static Data request
- Use a primary and secondary sort sequence for any selected datatype
- Choose an alphabetical ascending or descending sequence order
- Type your own report and column titles

See the Advance Reference guide, Advance Tools Catalogue, page 18, for details on the refinements you can make to the Constituents data category for this report.

All settings are entered by using the Flexible Report settings dialog.

The Expression Picker and Expression Builder facilities are located on this screen, if you want to create or use an existing expression as part of the static data request. See About Expressions and Functions, page 47

To specify additional settings for the Flexible Report:

1. Select the Constituents data category and a series.
2. Select Flexible Report from the Summary tab.
3. Click the Settings button.
4. Use Navigator to select a datatype. Select up to 5 datatypes. **Note:** The currency field is disabled if the datatype is not currency convertible.
5. Click the Remember Datatypes check box to store your datatype selections for use with Static Data requests.
6. Click the Next> button.
7. Click the check boxes of the datatype you want for your primary sort sequence, and click on either the ascending or descending alphabetical order buttons.
8. Click the check boxes of the datatype you want for your secondary sort sequence, if required, and click on either the ascending or descending alphabetical order buttons.
9. Click the Display Options you want: Report Title, Row Titles.
10. Click the Finish button to save your settings.
Latest Values & % changes over 3 periods Summary

This report displays latest value, high, low, and percent changes over 3 periods for Constituents and the constituents of a Local List. Values are displayed in list/series order.

You can:

- Select a function or expression, or build one
- Select 3 periods for the changes

To specify additional settings for the Latest Values & % changes over 3 periods Summary:

1. Select an appropriate data category and series.
2. Select the Summary tab.
3. Select Latest Values & % changes over 3 periods Summary from the selection list.
4. Click the Settings button.
5. Click the Function button to select a function or expression, or click the Expression Builder button to build a new expression.
6. Select the Start and End dates for the 3 periods.
7. Click OK to confirm your additional settings.

You can now make your report request.
Moving Average for a list

This report displays the moving average for Constituents and the constituents of a Local List.

You can:

- Select a datatype or expression
- Select the moving average period
- Select a second display date

To specify additional settings for the Moving Average for a list Summary:

1. Select an appropriate data category and series.
2. Select the Summary tab.
3. Select Moving Average for a list from the selection list.
4. Click the Settings button.
5. Select either the Use Datatype as the Expression option, OR the Use an expression option.
6. Select the moving average period from the Moving Average Period: drop down box.
7. Select the second display date from the Second display Date boxes.
8. Click OK to confirm your additional settings.

You can now make your report request.
Performance Ranked Report

The Performance Ranked Report ranks the constituents of a selected list in descending order of % price change, over a selected time period. Reported information, for each ranked series, includes price values as at the start and end of the time period plus actual and adjusted % price changes.

Settings enables you to choose one of three additional display options:

- Display the % price change relative to a specific index that you select. This data is displayed under an additional column labelled %Chg Rel.
  
  You can search through a complete list of Datastream and industry standard indices to select the relative index. Navigator is located on the Index Selection dialog to help you find your series.

- Display the % price change relative to a default index type that you select. This data, again, is displayed under an additional column labelled %Chg Rel.
  
  This option lets you to leave the decision on what relative index to use to Datastream. You choose the type (market or sector) and level of default indices (e.g. level 4), and Datastream chooses the actual relative index based upon the list you select.

- Turn off the relative/default index display.
  
  This option enables you to switch off the additional (optional) column % Chg Rel.

To specify additional settings:

1. Select the Constituents or Local Lists data category and an appropriate list.
2. Select the Summary tab.
3. Select Performance Ranked.
4. Click the Settings button.
   The Index Selection screen is displayed.
5. Choose an index:
   - For a specific index
     - ensure the Ignore Index check box is unchecked
     - click the Relative Index tab
     - use Navigator to find your index
     - select the required indices
• For a default index
  - ensure the Ignore Index check box is unchecked
  - click the Default Index tab
  - click either the market or sector options
  - select the required default market or sector index type

6 To turn off the relative index column
  - click the Ignore Index check box

7 Click the Sort Order tab.

8 Select the Primary and Secondary sort orders.

9 Click OK to save your report settings

You can now issue your report request with your additional settings.
Performance ranked over 3 months

This report displays, in percentage terms, the price performance of series in a selected constituent list over the last three months. The displayed percentage is the actual percentage change between the series price three months ago and today’s price. Both prices are displayed in the currency in which they are held. An additional percentage change value is converted to the local currency, if the local currency is different from the series reported.

- The settings facility gives you two options for selecting Y.
  - **Select default index**
    This option allows you to leave the decision on what relative index to use to Datastream. You choose the type (market or sector) and level of default indices (e.g. level 4), and Datastream chooses the actual relative index based upon the series you select.
  - **Select a specific relative index**
    You can search through a complete list of Datastream and industry standard indices to select the relative index. Navigator is located on the settings screen to help you find your indices.

- Select primary and secondary sort orders

**To specify additional settings:**

1. Select an appropriate data category and series.
2. Select the **Summary** tab.
3. Select **Performance ranked over 3 months**.
4. Click the **Settings** button.
5. Choose one of the following index options:
   - For an individual index
     - click the **Relative Index** tab
     - use Navigator to find your series
   - For a default index
     - click the **Default Index** tab
     - click either the market or sector options
     - select the required default market or sector index type

6. Click **OK** to save your chart settings.

You can now make your chart request.
Regression and Correlation for a list

This report displays the regression and correlation for Constituents and the constituents of a Local List.

You can:

- Select a base item, using Filter and Find: to speed your search
- Select the frequency. For example, they can represent daily, weekly, monthly, quarterly, or yearly prices
- Select the sort order
- Determine the type of plot scale, linear scale or logarithmic scale

To specify additional settings for the Regression and Correlation for a list

Summary:

1. Select an appropriate data category and series.
2. Select the Summary tab.
3. Select Regression and Correlation for a list from the selection list.
4. Click the Settings button.
5. Select the Base Item. Select the data category and the base item from the list displayed.
6. Select a plotting frequency by dragging the slider to the required frequency.
7. Select the sort order from the Sort Order drop down box.
8. Click either the Linear or Logarithmic option buttons.
9. For lists exceeding 100 items, select the start and end at list item numbers.
10. Click OK to confirm your additional settings.

You can now make your summary request.
Scatter Chart for a list

This displays a scatter chart for Constituents and the constituents of a Local List. You can:

- Type a chart title and legend
- Display a best fit line
- Determine the type of plot scale, linear scale or logarithmic scale
- Select expressions from the Expression Picker for the X and Y axis
- Select the X and Y axis ranges and intersection values

To specify additional settings for the Scatter Chart for a list:

1. Select an appropriate data category and series.
2. Select the Summary tab.
3. Select Scatter Chart for a list from the selection list.
4. Click the Settings button.
5. Type the chart title in the Chart Title field.
6. Type the legend in the Legend field.
7. Click the Best Fit Line Required box if you require one.
8. Click either the Linear or Logarithmic option buttons.
9. Select the X and Y axis ranges and intersection values.
10. Click OK to confirm your additional settings.

You can now make your summary request.
Scatter Chart for a list (data only)

This displays a scatter chart for Constituents and the constituents of a Local List.

You can:

- Type a chart title and legend
- Display a best fit line
- Determine the type of plot scale, linear scale or logarithmic scale
- Select expressions from the Expression Picker for the X and Y axis
- Select the X and Y axis ranges and intersection values

To specify additional settings for the Scatter Chart for a list:

1. Select an appropriate data category and series.
2. Select the Summary tab.
3. Select Scatter Chart for a list from the selection list.
4. Click the Settings button.
5. Type the chart title in the Chart Title field.
6. Type the legend in the Legend field.
7. Click the Best Fit Line Required box if you require one.
8. Click either the Linear or Logarithmic option buttons.
9. Select the X and Y axis ranges and intersection values.
10. Click OK to confirm your additional settings.

You can now make your summary request.
Static Data

Static data requests download values for a selected series at a particular point in time. **Settings** lets you to define the data you download from Datastream and determine how it is labelled. Using **Settings**, you can select up to 9 datatypes.

**Note:**
The datatype **NAME** is added as the first datatype for each request. **NAME** provides the title of the data series.

The type of datatype you can select is dependent upon the data category chosen. For equities, for example, you can select from Datastream, I/B/E/S and MSCI datatypes, and Worldscope, and Datastream Company accounts data items.

The **Expression Picker** and **Expression Builder** facilities are located on this dialog, if you want to create or use an existing expression as part of the static data request. See **About Expressions and Functions**, page 47.

**To specify additional settings for Static Data:**
1. Select an appropriate Data category and Series.
2. Select either the **Data** or **Comparison** tab.
3. Select **Static Data** from the selection list.
4. Click the **Settings** button.
5. Use Navigator to select your datatypes.
6. Select a **datatype** from the displayed list, select a **currency**, and click the right arrow button to add each datatype to your list. Select up to 9 datatypes. **Note:** The currency field is disabled if the datatype is not currency convertible.
7. Click the **Remember Datatypes** check box to store your datatype selections for use with **Flexible Report** requests. As the **Flexible Report** uses up to five datatypes, only the first five datatypes selected for Static Data requests are stored.
8. Click the **Display Options** you want: Titles, Column Headings, Row Headings, and Currency.
9. If your static data request is for a Local List, click the **Retain List** check box. The list of datatypes for your request will be retained on the host system so you can embed the data request in Excel.
10. Click **OK** to confirm your additional settings.

You can now issue your data request with your additional settings.
Yield Curve Chart settings

The Yield Curve Chart has been available, under the Charts tab, since the release of Datastream Advance 1.0. However, its use has been limited to displaying yield curves on Datastream compiled lists of bonds. These lists are of Government bonds for all major economies selected from the Economic reports/charts data category tab.

The Yield Curve Chart is still available for use with Economic reports/charts, however with Datastream Advance 4.0, the list selection and yield calculation facilities have been extended to bring it in line with the DSWindows equivalent - 401N. This chart is selected under the Summary tab and you can choose your own bond list under either the Constituents or Local Lists tabs. Settings lets you to make the following changes under their respective tabs:

First & Second Curve

- Set the power of curve (from 0 to 5), and short-end stabilisation (using interest rates) for the first curve. The bond list for this curve is selected on the main Request screen and is displayed in the field Your Current Selection when you click Settings.

- Set the power of curve (from 0 to 5), and short-end stabilisation (using interest rates) for an optional second curve. The second curve is selected by clicking the Second Curve check box and selecting a bond list using the series display grid and filter facilities.

General Settings

- Choose the basis on which the redemption yield used to plot the curve(s) is to be calculated; for example, using the maturity date, average life, equivalent life, etc.

- Choose the frequency of yields used in the yield calculation; for example, annual or semi-annual compounding of interest.

- Display scatter for first or second curve.

- Select two separate dates for one yield curve, or select one date if two yields curves are specified on the First & Second Curve screen.

Axis Settings

- Select what type of yield/life data is displayed on the Y and X axes. Typically this would be Redemption Yield for Y axis and Life for X axis, however you can select Duration or Modified duration for the X axis and Interest yield for the Y axis.

- Eliminate extreme values from the line plot for both curves by specifying Above and Below values for the Y and X axes, or allow Datastream to provide default values.

- Transform the X co-ordinate data to prevent any extreme values having an
unwarranted effect on the curves by using the X Axis Decimal Log Transform facility, or allow Datastream to provide default values.

- Change the Y and X axes scale range of the displayed chart and their intersection point, or allow Datastream to provide default ranges.

See the Datastream Graphics User Guide for a full description of all these settings.

**Example:**

In the following example, two bond yield curves are plotted against an Irish Government Bond index using both power 5 and power 3 curves with scatter.

1. Assuming you have downloaded the Irish Government Bond index (IRGVT) constituents using the Download a Constituent List option on the Local Lists wizard, select the Irish Government Bond index under the Local Lists tab.

2. Select the Yield Curve Chart under the Summary tab.

3. Click Settings to display the Yield Curve Chart Settings dialog.

4. On the First & Second Curve tab, select the Power of Curve required for the first curve; for example 3, by using the spin buttons.

5. To produce a second curve on the same bond list but using a different power, click the Second Curve check box and ensure that the Power of Curve 2 option is set to 5.

6. On the General Settings tab, type the required chart title (for example, Irish Government Bond List - Yield Curve) in the Title field.

7. Set the required Yield Basis, Yield Frequency and Display Scatter options by selecting from their respective picklists. Selecting Datastream Default for Yield Basis will select Average Life for Eurobonds with a sinking fund, Equivalent life for non-Eurobonds with sinking fund and final date for all other issues.

8. Click the Calculation Date (First Curve) button to display the Configure Dates dialog to select the bond yield curve calculation date. If you have opted to display a second curve on the First & Second Curve tab (as in this example), you can only use one date. If you are using just one curve, then you can display it on two different dates using both Calculation Date buttons.

9. On the Axis Settings tab, select the required X and Y Axis options, the default values for these include Life plotted on the X axis and Redemption Yield plotted on the Y axis. Use the dropdown lists to select the required axis options.

10. Set the required scale ranges (for example Above 0 and Below 100) for the X and Y Axis Ranges, if required. Alternatively, use the Datastream Default.
11 Enter values in the Display Modification section to specify the numerical range of the axes and the point at which they should intersect, if required. Alternatively, use the Datastream Default.

12 Click **OK** to complete your Yield Curve Chart settings.

13 Click **Run Now** to issue the Yield Curve Chart request.
Comparison settings

Correlation Chart for 2 items

This displays a correlation analysis for two or more series over time.

You can:

- Type a Chart Title
- Determine the frequency of the price bars. For example, they can represent daily, weekly, monthly, quarterly, or yearly prices.
- Determine the type of plot scale, linear scale or logarithmic scale

See the Advance Reference guide, Advance Tools Catalogue, page 18, for details on the display period, datatypes and currency adjustments you can make for each data category.

These settings are made on the Correlation Chart for 2 items settings dialog.

To specify additional settings for the Correlation Chart for 2 items:

1. Select an appropriate data category and series.
2. Select the Comparisons tab.
3. Select Correlation Chart for 2 items from the selection list.
4. Click the Settings button.
5. Type a title in the Chart Title field.
6. Select a rebase option from the Rebase Options drop down box.
7. Click either the Linear or Logarithmic option buttons.
8. Select a plotting frequency by dragging the slider to the required frequency.
9. Click OK to confirm your additional settings.

You can now make your chart request.
Datastream 401X Format

This tool is for DSWindows users, who want to use their existing 401X formats within Advance. Once you have run your 401X formats in Advance, the formats can be saved in a Project as Advance requests for regular use and refreshing. Any 401X format can be used; this includes formats with up to four symbolic variables. The display attributes (for example X and Y axis scale settings) of the 401X formats are maintained when you issue the request. You can override the display period or use the format’s display period.

- You need to know the 401X format code, for example Z34G, and the number of symbolic variables (X, Y, etc.) in the format. (For formats with no symbolic variables, the Number of Series in the setting screen should be set to 0).
- For a format that has two symbolic variables, (e.g., Z34G has a stock and an index) type 2 in the Number of Series field.

To specify settings for the Datastream 401X Format comparison:

1. Select the Comparison tab.
2. Select Datastream 401X Format from the list.
3. Click the Settings button.
4. Type the 401X format code in the Format Code field.
5. Use the up and down buttons to select the number of series the format expects (up to four).
6. Click the Use dates from format check box to use the format’s dates, if required.
7. Click OK on the Settings dialog.
8. Select a series, if the format has symbolic variables.
9. Click the Add button to add the number of series to the Comparison Request List.
10. Repeat steps 6 and 7 for the number of series that are required in the 401X format.
11. Adjust the display period, if required.
12. Click Run Now to issue your 401X Format comparison request.
Performance range and average for 8 series

You can:
- Select a datatype or expression
- Select a second display date

To specify additional settings for the Performance Range & Average for 8 series:
1. Select an appropriate data category and series.
2. Select the Report tab.
3. Select Performance Range & Average for 8 series from the selection list.
4. Click the Settings button.
5. Select either the Use Datatype as the Expression option,
   Select the type of Datatype from the drop down box and select the datatype from the list displayed. You can use Find: to speed up your search.
   OR the Use an expression option
6. Select a second display date from the Second display Date boxes.
7. Click OK to confirm your additional settings.

You can now make your report request.
Recent Values & Ranges for 3 series

This chart shows the latest value, high, low, and annual high/low/averages for up to three series.

You can:

- Select a number of years, up to the maximum time limit of the stored data, for ranges.

To specify additional settings for the Recent Values and Ranges for 3 series:

1. Select an appropriate data category and series.
2. Select the **Comparisons** tab.
3. Select **Recent Values and Ranges for 3 series** from the selection list.
4. Click the **Settings** button.
5. Select the number of years for ranges.
6. Click **OK** to confirm your additional settings.

You can now make your chart request.
Regression & Correlation for 10 series

This report displays the regression and correlation for 10 series.

You can:

☐ Select a datatype or expression
☐ Select a second display date

To specify additional settings for the Regression & Correlation for 10 series:

1 Select an appropriate data category and series.
2 Select the Comparisons tab.
3 Select Regression & Correlation for 10 series from the selection list.
4 Click the Settings button.
5 Select either the Use Datatype as the Expression option,
   Use Navigator to select your datatypes
   OR
   the Use an expression option
6 Select a second display date from the Second display Date boxes.
7 Click OK to confirm your additional settings.

You can now make your report request.
Scatter Chart for 2 Items

This displays a scatter chart for a constituent list or two series over a period.

You can:
- Type a chart title and legend
- Display a best fit line
- Determine the type of plot scale, linear scale or logarithmic scale
- Select expressions from the Expression Picker for the X and Y axis
- Select the X and Y axis ranges and intersection values

To specify additional settings for the Scatter Chart for 2 items:
1. Select an appropriate data category and series.
2. Select the Comparisons tab.
3. Select Scatter Chart for 2 items from the selection list.
4. Click the Settings button.
5. Type the chart title in the Chart Title field.
6. Type the legend in the Legend field.
7. Click the Best Fit Line Required box if you require one.
8. Click either the Linear or Logarithmic option buttons.
9. Select the X and Y axis ranges and intersection values.
10. Click OK to confirm your additional settings.

You can now make your summary request.
Time Series Data

The settings available for time series data requests enable you to specify the frequency of reported data for the time period selected. The default is daily, however you can change this to Weekly, Monthly, Quarterly and Yearly. There is no restriction on the amount of data you can display except for a limit of 16,384 rows in the display area. So for example, you could display over 10 years worth of daily data.

In addition to the settings for data frequency, you can also select a number of display options which include:

- **Titles** - general headings for row and column titles, for example CODE for series and datatype mnemonics.
- **Column headings** - the datatype mnemonic at the top of each column
- **Row headings** - the series mnemonic at the head of each row for each series selected
- **Currency** - display an additional column with the title CURRENCY and with the traded currency for each selected series.

The selections are made on the **Time Series Data** settings screen:

The Lin/Log settings are not available for time series data requests.

**To use the Time Series Data settings:**

1. Select an appropriate data category and series.
2. Select the **Data** tab.
3. Select **Time Series Data** from the selection list.
4. Click the **Settings** button. The **Time Series Data settings** dialog is displayed.
5. Choose the data **Frequency** by dragging the slider to select the required frequency.
6. Select the **Display Options** by clicking the required check boxes.
7. Click **OK**.
Values over time for 12 Economics

You can:
- Select monthly, quarterly, or annual frequency
- Select the start and end dates

To specify additional settings for the Values over time for 12 Economics:
1. Select an appropriate data category and series.
2. Select the **Comparisons** tab.
3. Select **Values over time for 12 Economics** from the selection list.
4. Click the **Settings** button.
5. Select a frequency option.
6. Select the **Start** and **End** periods.
7. Click **OK** to confirm your additional settings.

You can now make your chart request.