DATASTREAM FOR OFFICE

(DFO - 2.1)

USER MANUAL FOR EXCEL

ISSUE 1

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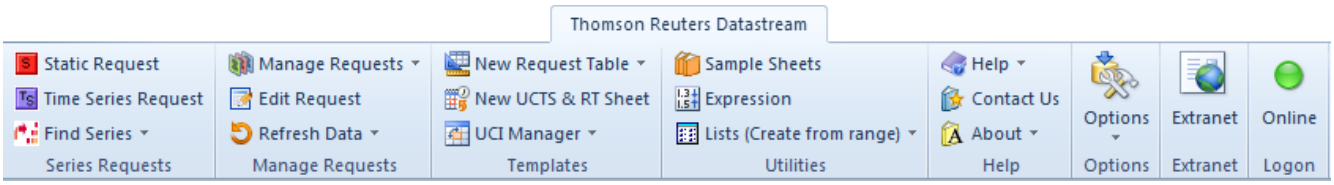
1 INTRODUCTION

THE DATASTREAM FOR OFFICE (DFO) INTERFACE

To use Datastream for Office (DFO), use the **Datastream Thomson Reuters** menu in your Excel application.

DFO menu in Excel 2007 and above



USING DATASTREAM FOR OFFICE

In DFO you can make static, and time series requests.

Static requests

To request data for a specific date. For example, the price, PE and dividend yield for Pepsico and Coca-Cola for 01/01/05.

For more information, see Creating a static request.

Time series requests

To request data over a specific period, defined by a start date, end date, and frequency of data. For example, the daily price for Pepsico from 01/01/05 to 01/01/06.

For more information, see Creating a time series request.

Request Manager

Use the Request Manager to manage your embedded requests. All the chart and data requests in your Excel work book are listed with their details. You can edit, delete, or refresh the requests individually or together.

For more information, see Using the request manager.

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2 USING DFO OPTIONS DIALOG

SETTING THE EXCEL ADD-IN SYSTEM OPTIONS

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

- Request Format options
- Connection Settings
- Request URL Settings

For assistance on using Thomson Reuters Datastream's Excel functionality and content - use the **Contact Us** option on the menus.

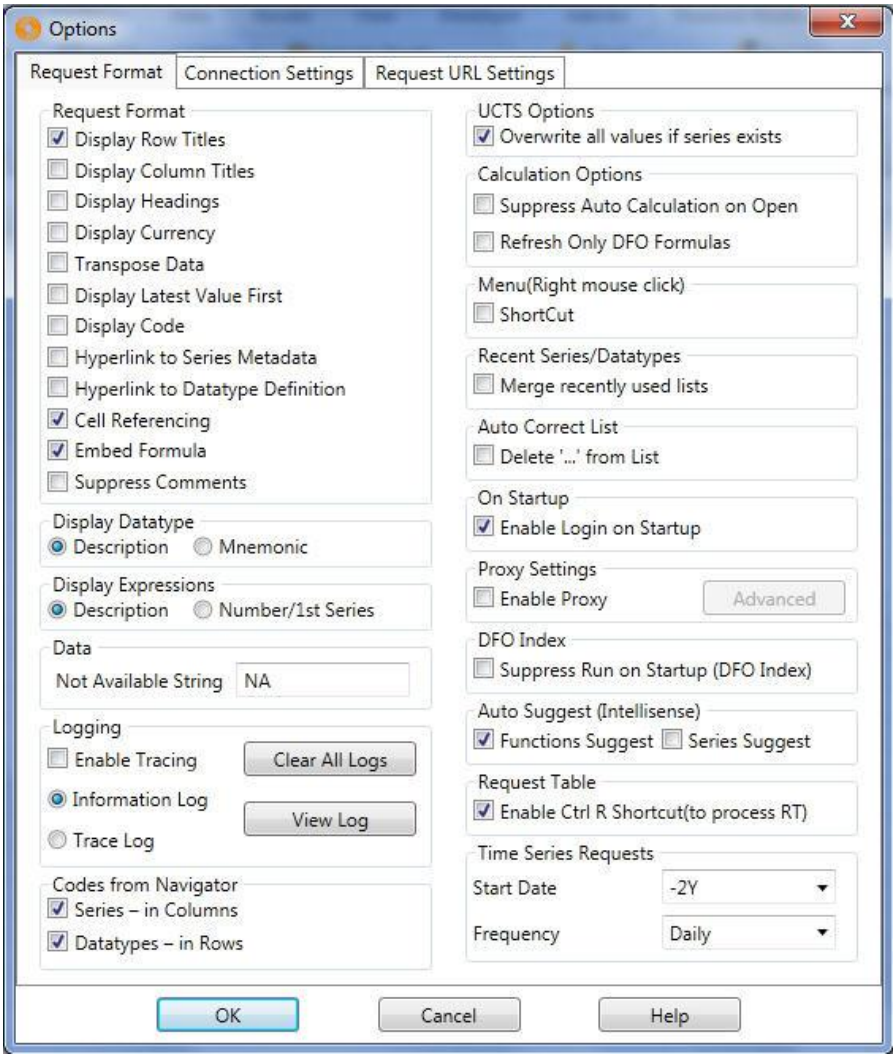
To select these options:

1. Choose **Options** from the **Thomson Reuters Datastream** menu.

   The **Options** dialog is displayed.

2. Select the **Request Format** tab.

3. Select the options you require by checking the boxes:



4. Click **OK**.

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REQUEST FORMAT OPTIONS

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

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

The request format options are:

- **Row Titles** - displays the series code at the top of each row for each series.
- **Column Titles** - displays the datatype mnemonic at the top of each column.
- **Headings** - displays a general heading for row and column titles. For example, the date of the request.
- **Currency** - displays an additional column with the title Currency and with the traded currency of each selected series.
- **Transpose Data** - displays individual time series data across the Excel spreadsheet in rows. This is particularly useful if you are requesting data over very short time periods or larger reporting frequencies, that is quarterly or yearly. The maximum number of columns that you can use in Excel is 255.
- **Latest Value First** - displays the latest value first in the request result.
- **Display code** - displays the series mnemonic. This option is available for Time Series request.
- **Hyperlink to metadata** or **Datatype definition** - Adds a hyperlink to the series code to link to the classifications and metadata pages from Navigator for the series (also enable series that are now dead or inactive to be identified in your workbook).
- **Cell Referencing** - this enables this with or without the trigger cell. This trigger uses a cell above the request to detect if the contents of the referenced cells have changed to initiate an update.
- **Embed Formula** - ensures that the request is embedded in Excel as a dynamic, refreshable object when saved. If you do not select this option, the results of the request cannot be refreshed and remains as plain text/numbers.
- **Suppress Comments** - removes row headings e.g Date, Type, Currency etc.

Display Datatype - According to the option selected, the Datatype description or mnemonic is displayed in the Static request results.

Display Expression - According to the option selected, the Expression description or number is displayed in the Static and Time Series request results.

Data options - The **Not Available String** field enables you to type the text that you want displayed in Excel when data is not available from Datastream. For example, **#N/A, Blank**.
Note: Enter "Blank" word in Not Available String input field if you wish to have not available values as empty cells.

Logging: Select **Information** or **Trace** to view and delete logs, note that delete log clears all old logs except the current day's log.

Codes from Navigator: You can set default display for codes in (column / row) for Series and Datatype when they are returned from Navigator.

UCTS Options: Overwrite all values if series exists - to overwrite existing values.

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Calculation Options

- **Suppress Auto Calculation on Open -** you can enable the auto calculation on startup.
- **Refresh Only DFO Formulas-** only DFO Formulas get refreshed.

Menu (right click mouse)

- **ShortCut -** this enables the Excel worksheet right mouse click menu giving the Static Request, Time Series Request, and Request Management options.

Recent Series/ Datatypes

- **Merge recently used lists -** Select to display series and datatype that is used in both static and time series requests in the dropdowns in static and time series requests.

Auto Correct List

- Select **Delete** "..." from the list is removed from Excel's default Autocorrect settings whereby "..." is replaced by the symbol "...".

On Startup – this option allow you to enable the DFO Add-in on start off Excel.

Proxy Settings – Checks for the Internet / Proxy Settings to access Datastream for Office. Click here for more information.

DFO Index (Suppress Run on Startup) – overrides the automatic refresh setting of any embedded requests.

Auto Suggest (Intellisense):

- **Functions Suggest**: This option enables you to see the functions and parameters available for the functions with links to the help files.
- **Series Suggest:** This option enables you to see matching series as you type (with become available with a Navigator release).

Enable Ctrl+R shortcut (to process RT): You can enable and disable shortcut (Ctrl+R) for process request in Request Table using options dialog.

Time Series Requests: You can set default Start Date and Frequency for Time series requests.

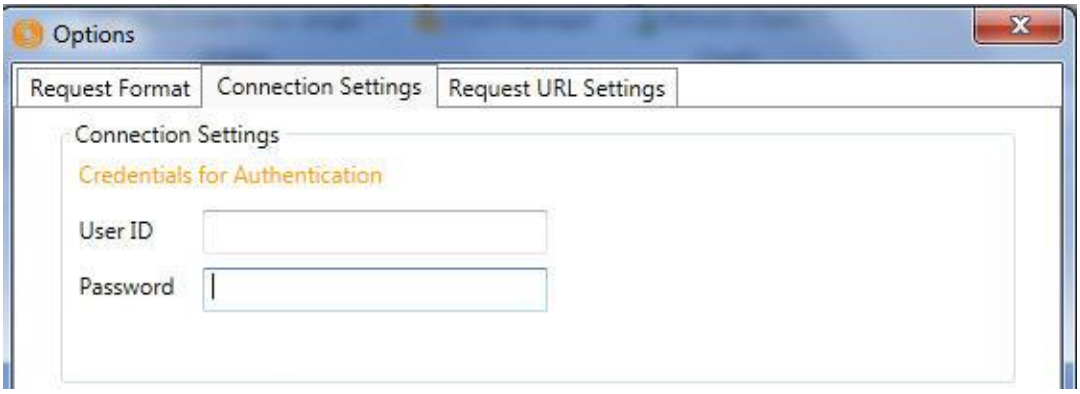
SETTING THE USER CREDENTIAL

You can configure user credential options in the **Connection Settings** tab.

To select these options:

1. Choose **Options** from the **Thomson Reuters Datastream** menu.

   The **Options** dialog is displayed.
2. Select the **Connection Settings** tab.



3. In the **Credentials for Authentication** area, type a *user name* and *password.(*Datastream Child ID or Thomson One ID and Password)
4. Click **OK** to save your new setting and close the **Options** dialog.
5. Click the **Offline** icon from **Thomson Reuters Datastream** menu to configure the user authentication.

Note: If correct credentials are supplied, Button status will be changed to '**Online'**. In case of invalid log-in credentials, proper error message will be displayed. Anytime during the usage of the add-in you can change user id, password or DSWS URL in **Options** dialog. If you change any of these parameters, automatically the ribbon UI will displayed as disabled. You need to click on '**Online'** button again to take effect the new changes. Please note that excel restart is not needed for these changes.

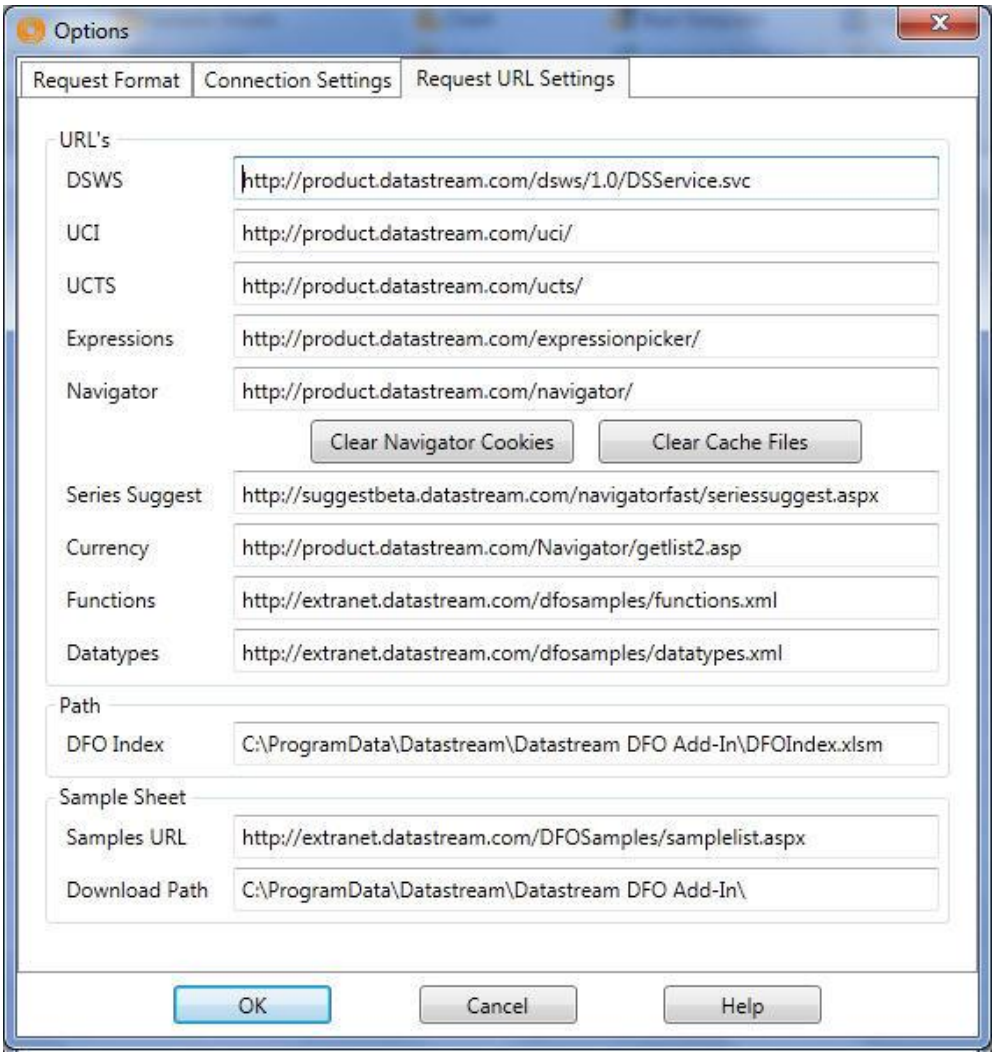
SETTING THE REQUEST URL SETTINGS

You can configure request URL in **Request URL Settings** tab.

To select these options:

1. Choose **Options** from the **Thomson Reuters Datastream** menu.

   The **Options** dialog is displayed.
2. Select the **Request URL Settings** tab.



URL's

- **DSWS (Datastream Webservices):** this allows the URL for the DSWS to be configured.
- **UCI (User Created Indices):** this allows the URL for the UCI Manager to be configured.
- **UCTS (User Created Time Series):** this allows the URL for the UCTS to be configured.
- **Expressions:** The Server field enables you to define the location of the server from which you would like to run Datastream Expressions Picker / Builder.
- **Navigator:** The **Server** field enables you to define the location of the server from which you would like to run **Datastream Navigator**.
    - You can use **Clear Navigator Cookies** button for clearing Navigator & Internet Explorer temp cache and cookies files.
    - You can use **Clear Cache File** button for clearing Currency.xml and Function.xml.
- **Series Suggest:** This option enables you to see matching series as you type (with become available with a Navigator release).
- **Currency:** this allows the URL for the Currency to be configured.
- **Functions:** this allows the URL for the Functions to be configured.
- **Datatypes**: this allows the URL for the Datatype to be configured.

Path

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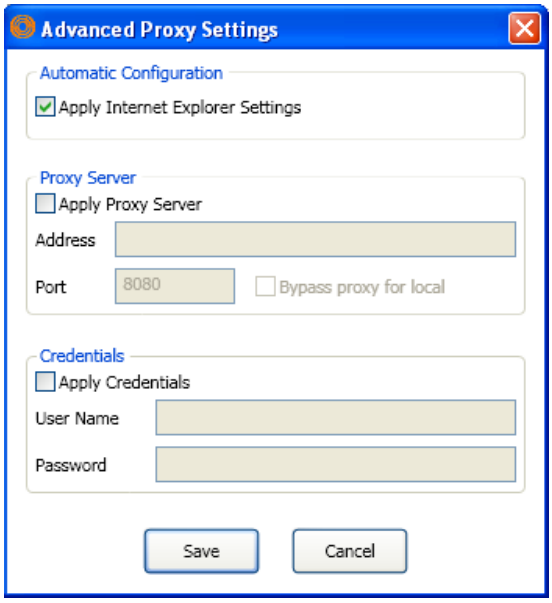
- **DFO Index:** This specifies the location where DFO Index file are stored.

Sample Sheet

- **Samples URL**: This specifies the URL from where DFO Samples can be downloaded.
- **Download Path**: The download path for the DFO Samples file can be specified here.

USING PROXY SETTINGS

You can now set proxy settings, by checking **Enable proxy** checkbox and click on the **Advanced** button. The **Advanced Proxy Settings** dialog allows you to specify proxy related details.



You have three proxy settings options available:

a. **Automatic Configuration**: Use Internet Explorer Proxy settings.
b. **Proxy Server**: Configure your own proxy settings.
c. **Credentials**: Specify proxy logon credentials (User name and Password).

Note 1: If Automatic Configuration setting is not working, use Proxy Server setting with Credentials.

Note 2: Internet Explorer proxy setting is configured by default when you check **Enable proxy** checkbox and **Save** button in **Options** dialog.

CREATING DATA REQUESTS IN EXCEL

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

The data request creation facilities available in Datastream are also available in Excel.

Static Data	Time Series Data
Series selection – including Datastream equities, market indices, commodities, bonds, interest and exchange rates, investment and unit trusts, warrants and economic series.	Series selection – including Datastream equities, market indices, commodities, bonds, interest and exchange rates, investment and unit trusts, warrants and economic series.
List selection – including user created mainframe lists and constituent lists.	List selection – including user created mainframe lists and constituent lists.
Datatype selection – static datatypes for Datastream, MSCI, I/B/E/S and FTSE.	Datatype selection - time series datatypes for Datastream, MSCI, I/B/E/S and FTSE.
Expression selection - including Datastream global and user created expressions.	Expression selection – including Datastream global and user created expressions.
	Frequency of reported data - including daily, weekly, monthly, quarterly and yearly.
Currency Convertor - including currency	Currency Convertor - including currency.
Date of requested data.	Start and end dates for display period.
Format options - including selection of column and row title and headings.	Format options - including selection of column and row title and headings.

The **Intellisense** option enables you to see the functions and parameters available for the functions with links to the help files.

The **Editor** option enables multiple series or datatypes/functions/expressions to be easily reviewed, edited and extended with links to the metadata.

The **Hyperlink to Metadata** option enables series codes to be linked to the Navigator classifications and metadata pages. This also enables series that are now dead or inactive to be identified in your workbook via the **Search For Dead Codes** menu options.

The **Hyperlink to Datatype Definition** option enables series codes to be linked to the Navigator Datatype Definition page.

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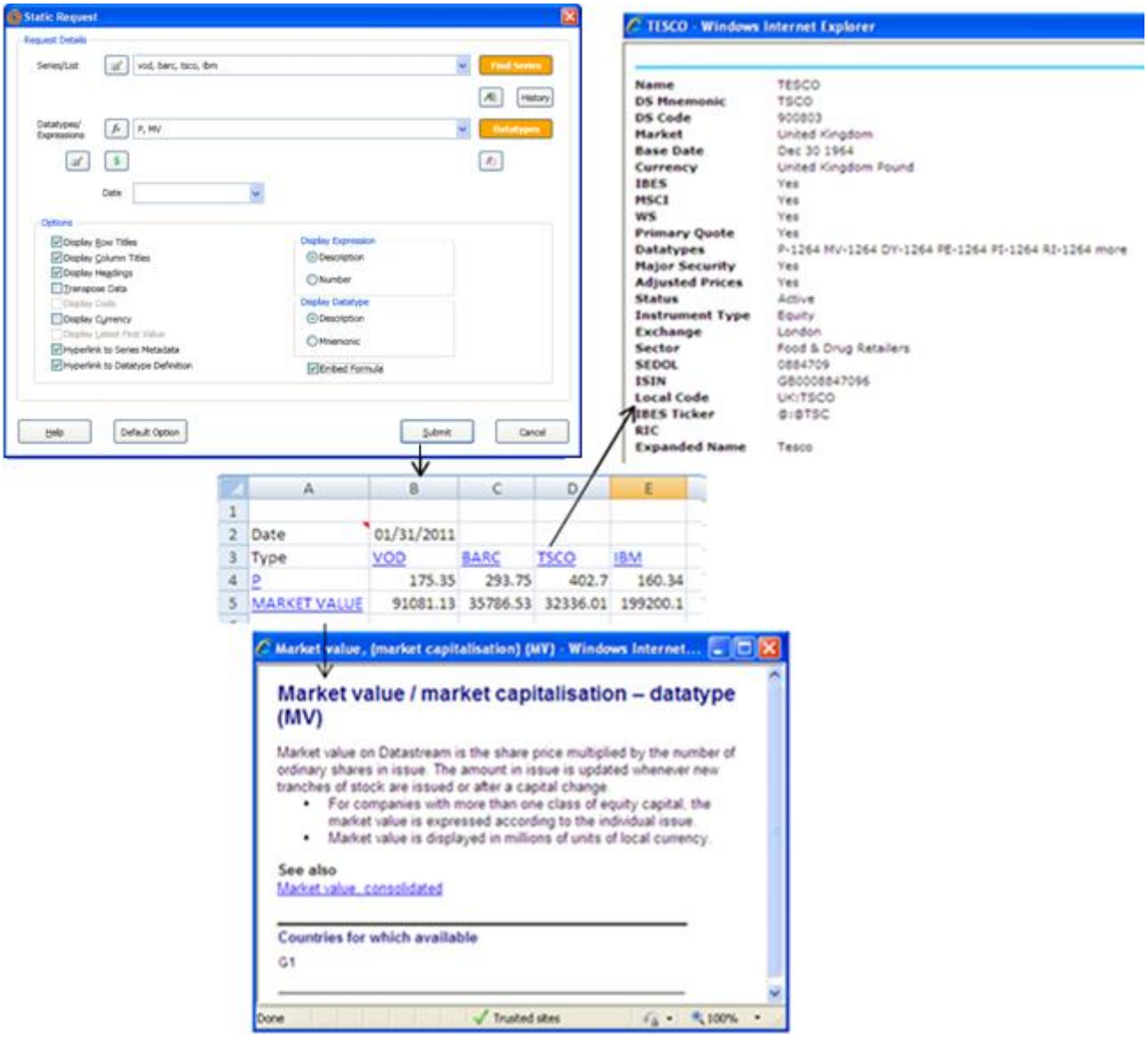

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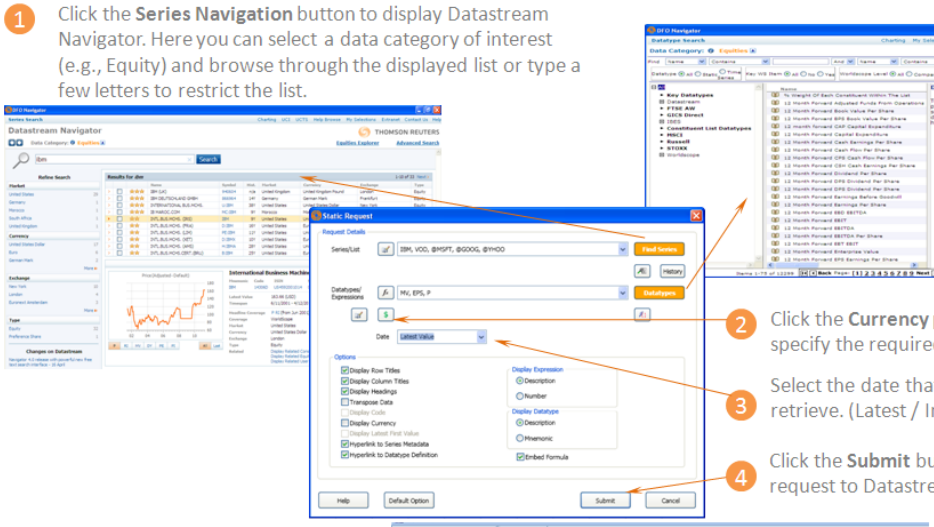
CREATING STATIC DATA REQUESTS

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

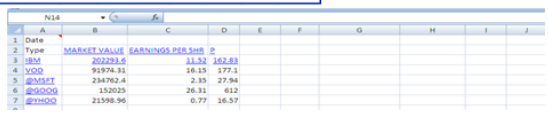
The minimum you need to do to create a static data request is select a series, a datatype, and a start date on the **Datastream Static Request** dialog. You can then **Submit** the request to Datastream. The results are displayed directly in the spreadsheet with row and column headings (if selected).

Example - Five series and static datatypes

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



2. Click the **Currency picker** button to specify the required currency.
3. Select the date that you want to retrieve. (Latest / Intraday value)
4. Click the **Submit** button to issue the request to Datastream.
5. The result of your static data request are embedded in the worksheet at the current cell position.

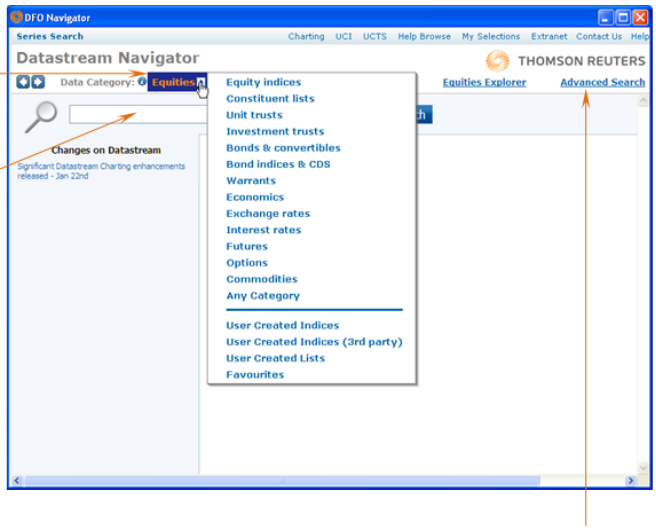


Selecting series

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

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

1. Select a Category from the list.
2. Simply type the text you believe best describes the series in the input box and Hit Enter or select **Search** button.



Note: You can also use "**Advance Search**" option for specific certiera search.

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You can also use the **Series Suggest** feature for selecting the series. To enable check the **Series Suggest** option from **Option** dialog (Note this will not be available till Q4 12) and configure the Series Suggest URL.

If you don't know the Datastream mnemonic for the required datatype but you know the general description, for example Price, choose

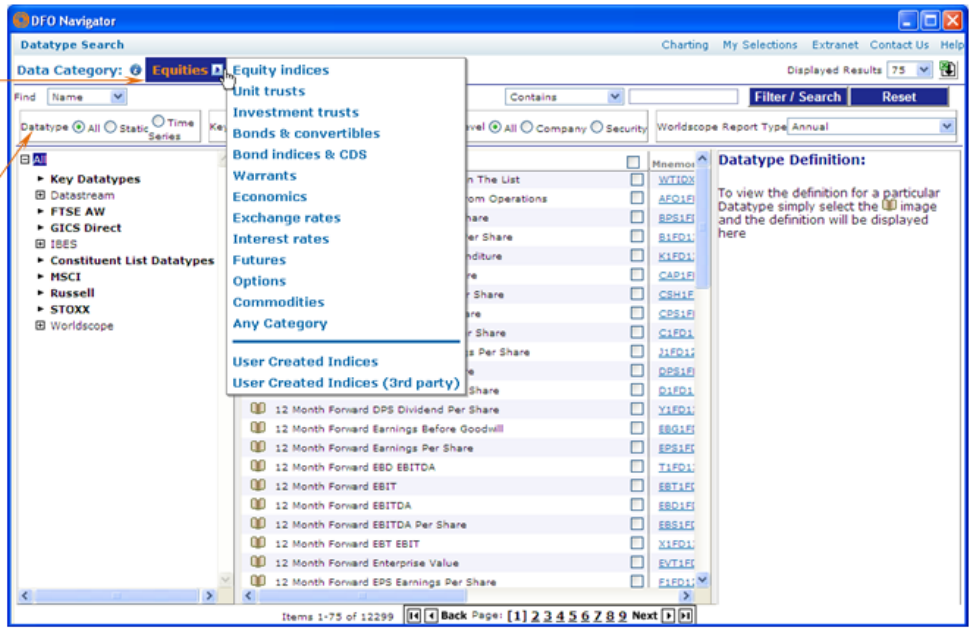
Selecting datatypes

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

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

1 Select the Datatype Category from the list. If your series is an Equity series, (as in this example) you will need to select Equities.

2 Select the type of datatype you want to use. In this instance it will be Time Series Datatypes, but you can select datatypes from the dropdown list.



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

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

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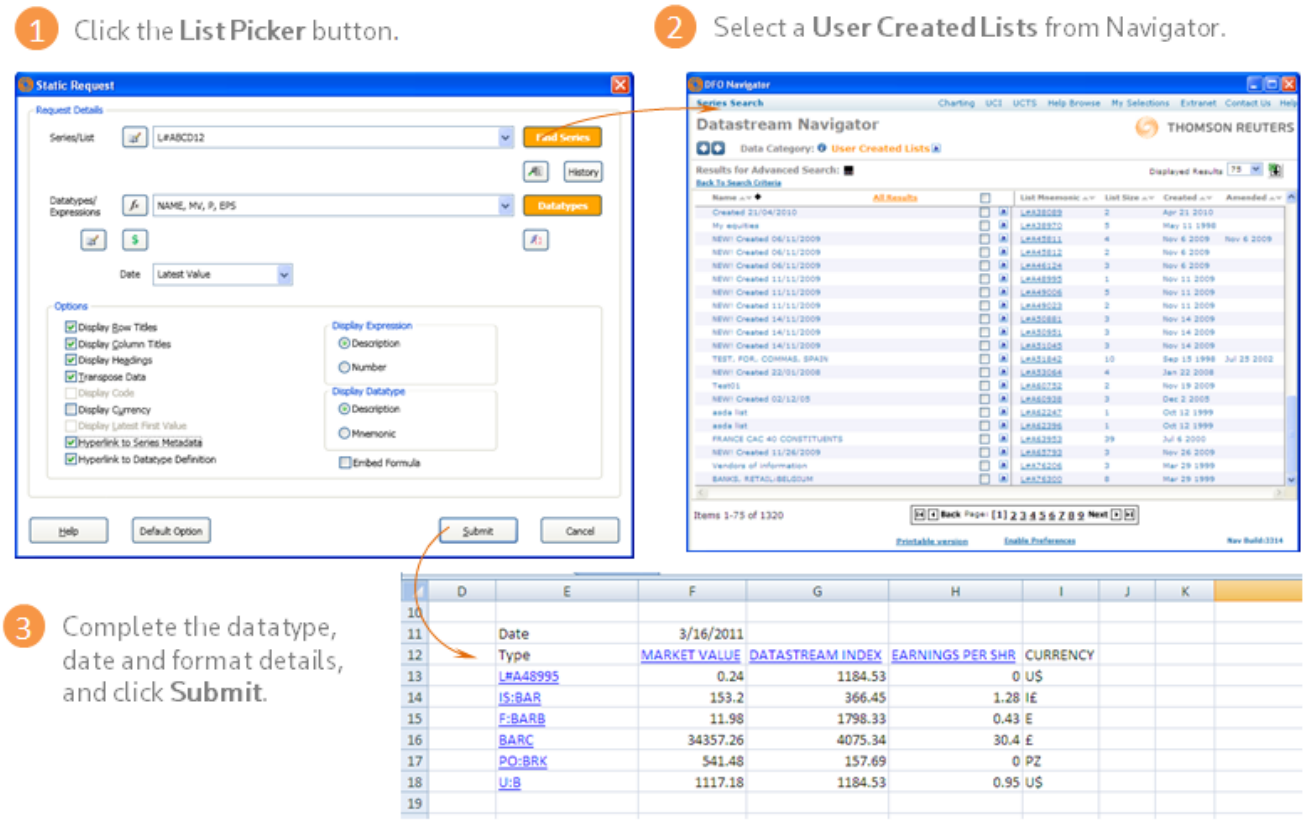
Selecting lists

You can use lists stored on the Datastream host, rather than selecting a number of individual series. These lists include:

- User lists (i.e. L#*xxxx* lists) that are stored on the Datastream host system. See Creating user lists.
- Constituent lists; for example, LFTSE100.

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

Example - User created list and 3 static datatypes



Selecting expressions

For static data requests, you can browse and select expressions stored on the Datastream host system. The Static Request Expression Picker, displayed by clicking the **Expression Builder** button, on the Static Request screen, can display all user created expressions or Datastream global expressions, or both. See Using Expressions. A **Refresh Grid** button enables you to update the list of expressions held on your PC from the Datastream host system.

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

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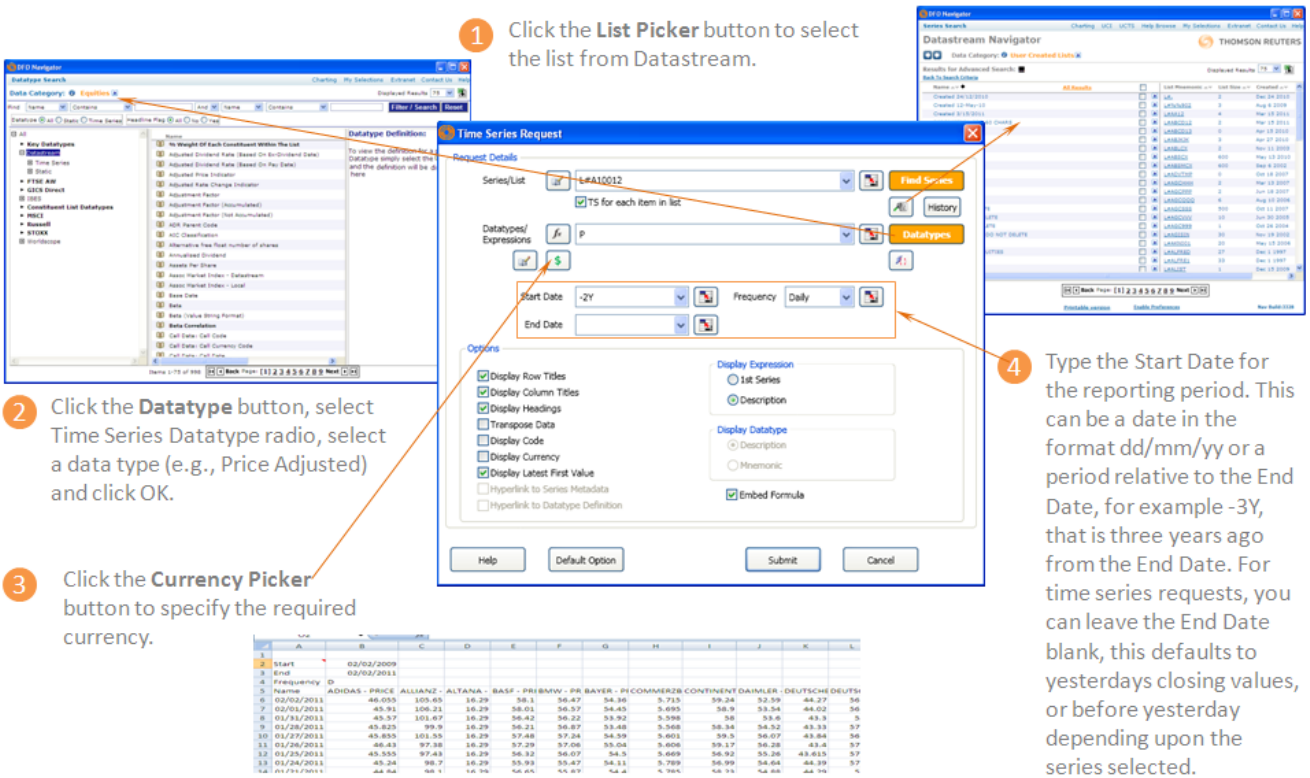
CREATING TIME SERIES REQUESTS

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

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

Example



USING LISTS WITH TIME SERIES REQUESTS

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

To indicate that you want a time series on each datatype that you enter, you must click the **TS for each item in list** check box. This can be switched off in the options dialog.

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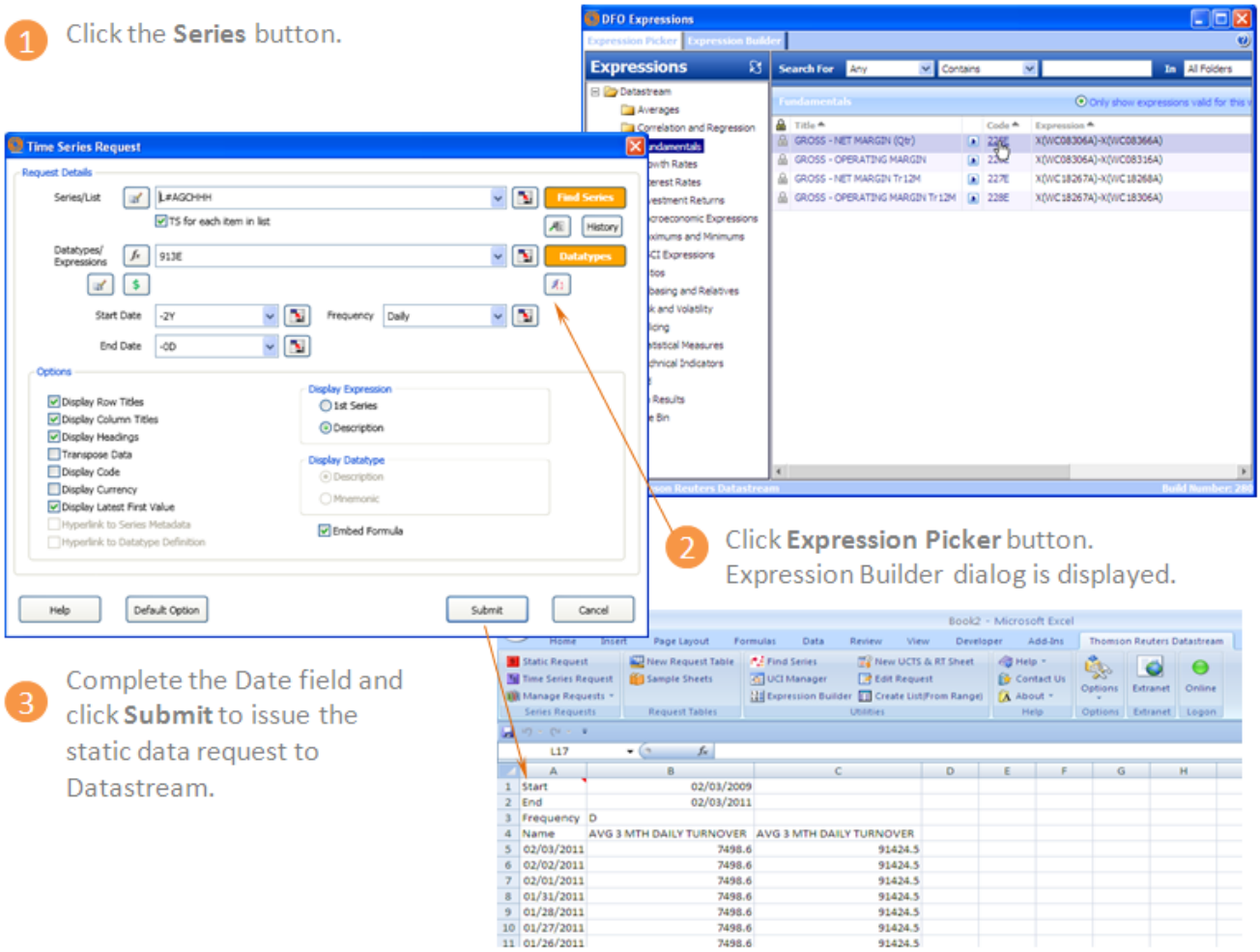
Selecting expressions

For time series data requests, you can browse and select expressions stored on the Datastream host system.

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

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

Example - Percentage change over one year of market index constituents



Selecting dates

You can use locale date format such as mm/dd/yy – and the date will be held in the DSGRID formula in universal date format, for example 2011-01-01, enabling the sheet to be opened in different locale date formats (note if dates are entered in formulas in your locale data format, it will not then be possible to open with a different locale).

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

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

USING SERIES EXPRESSION EDITOR IN STATIC AND TIME SERIES DIALOGS

The Expression Editor helps you to edit long strings you have entered in the Series/Lists (Time Series dialog) or the Datatypes/Expressions (Static dialog) text boxes in Excel.

Series / Expression Editor launched from the Series/Lists (Time Series dialog)

In a **Time Series** request, you can enter series, datatypes and currency conversion combinations.

1. Click the **Editor** button next to the **Series/Lists** textbox in the **Times Series** dialog. **Edit Series/Lists** dialog is displayed.

2. You can construct an expression in the Editor using the **Navigator** button Find Series and/or the Function/Expression/Currency pickers .

3. Click the ***fx*** button to select a function. Once you select a function and click **OK, Function arguments** dialog is displayed.

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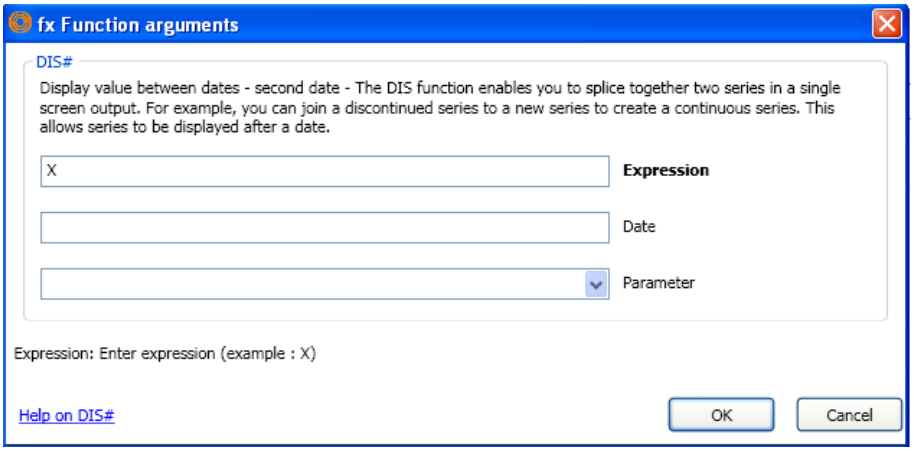
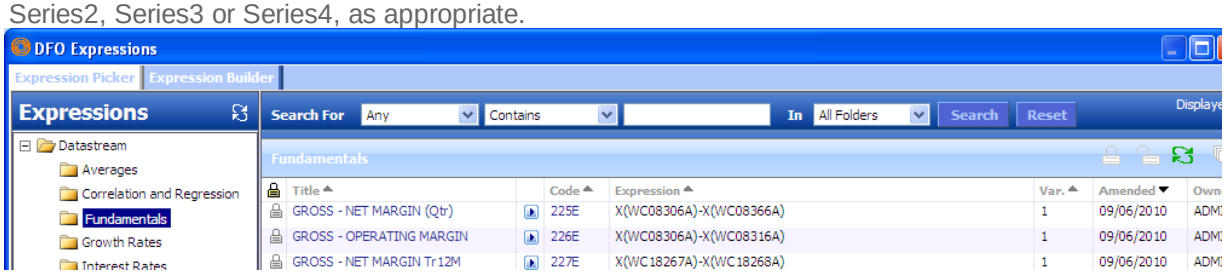


4. When you click **OK** in the dialog above, if “X”, “Y”, “Z”, “A” is displayed the **Expression** field, then in the text returned to the Editor - Series1, Series2, Series3, Series4 are displayed depending on the number of substitutable variables in the function. In the example above, MAV#(X,1Y) is returned as MAV#(Series1,1Y).

5. When you click the **Expression Picker** button in the **Edit Series/Lists** the **Expression Picker** is displayed showing **All the expressions on the ID**. When you return the expression to the Editor it returns the name of the Expression with symbolic placeholders “X”, “Y”, “Z”, “A” replaced by Series1, Series2, Series3 or Series4, as appropriate.



6. But, when you click the **Expression Picker** button in the **Datatypes/Expressions** (**both Static and Time Series** dialog) the **Expression Picker** is displayed showing only those expressions with 1 symbolic variable.

7. When you click the **Currency Picker** button available in the **Times Series** request, **Datatype Currency** dialog is displayed. Select a Currency and click **Apply Last/Selected** button to apply currency like: SERIES~Currency (Eg: BAY~AL).

Other functionalities in the Expression Editor (both Static and Time Series dialog)

- Click this button to delete the text in the Editor area.

- Click this button to view classifications and metadata displayed from the Navigator. For functions, this button is not enabled.

- Click this button to replace the selected item in the Selector grid below the text in the Editor area.

- Click this button to add Editor text as new item in Selector.

- Click this button to delete item from Selector.

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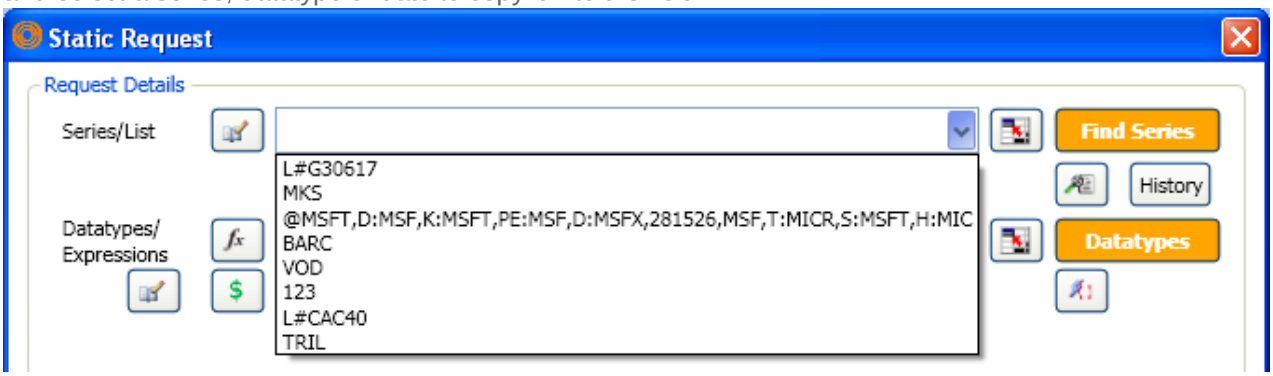
- Click these buttons to move items in the Selector up and down.

SHORTCUTS WHEN ENTERING REQUEST DETAILS

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

- Series, datatype, and date dropdown lists

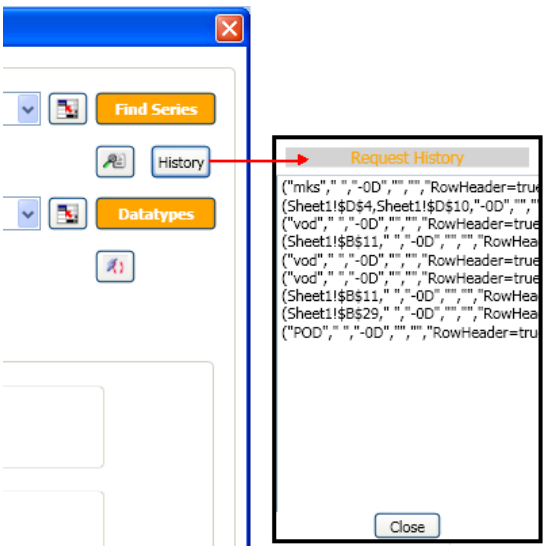
  This feature enables you to select from a dropdown list, under the **Series**, **Datatype** and **Date** field, series, datatypes and dates that you have previously used in one Excel session. Simply click on the dropdown list and select a series, datatype or date to copy it into the field.



Note: You can merge list using "**Merge recently used lists**" option from **Options** dialog.

- Select last request parameters

  You can re-insert the parameters for any of your previously used requests by clicking the History Button and selecting the request details from the displayed list, for example:



Selecting the request details from this list inserts all the details in the relevant fields. Click **Submit** to issue the request.

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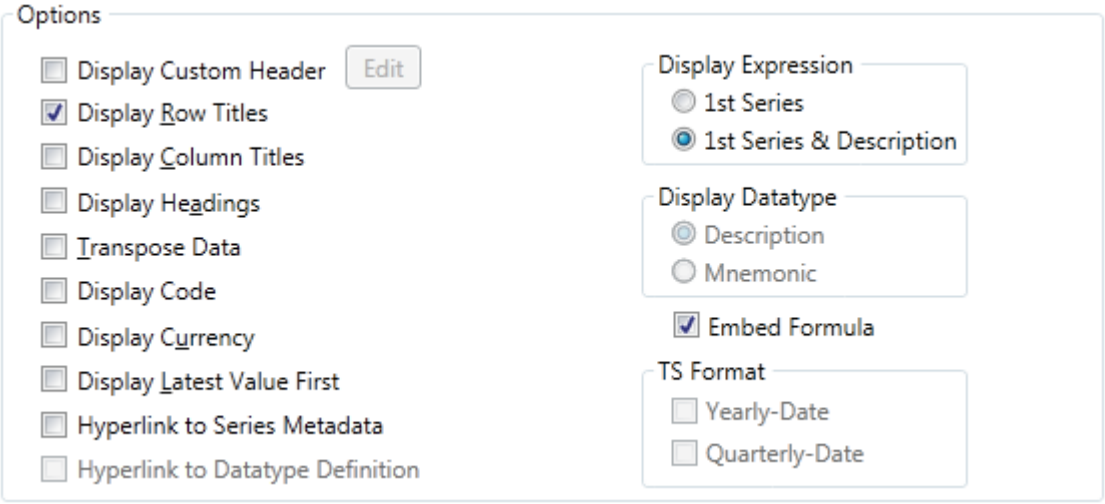
FORMAT OPTIONS

Format options for static and time series requests

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



Note: **Custom Header**, **Display Code** and **Display Latest First Value** options are not valid for Static request.

TS Format options: Yearly-Date and Quarterly-Date will display the dates in an Excel locale date format rather than 2011 or Q1 11.

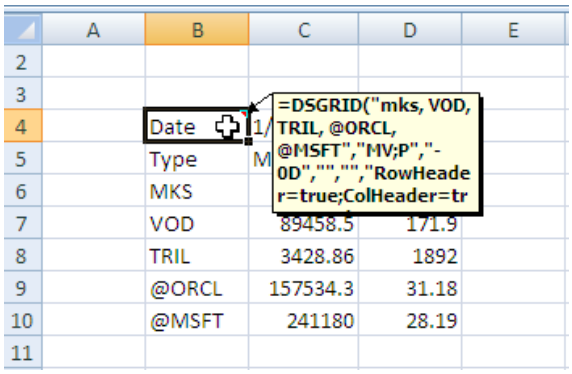
Select or deselect the required format options and click the **Submit** button. The selected options are displayed when you make a request.

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

EDITING A DFO FORMULA DATA REQUEST

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

The quickest and most convenient method of editing a DFO Formulas data request in Excel is to using **Edit Request** option from **Thomson Reuters Datastream** menu. For example:



You can also access **Edit Request** option from mouse right click menu.

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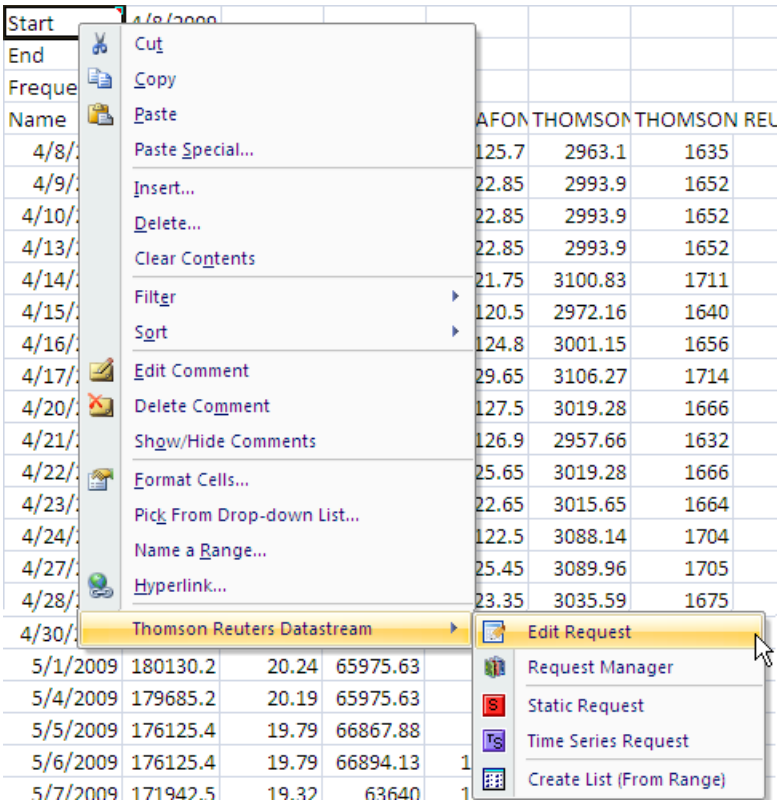

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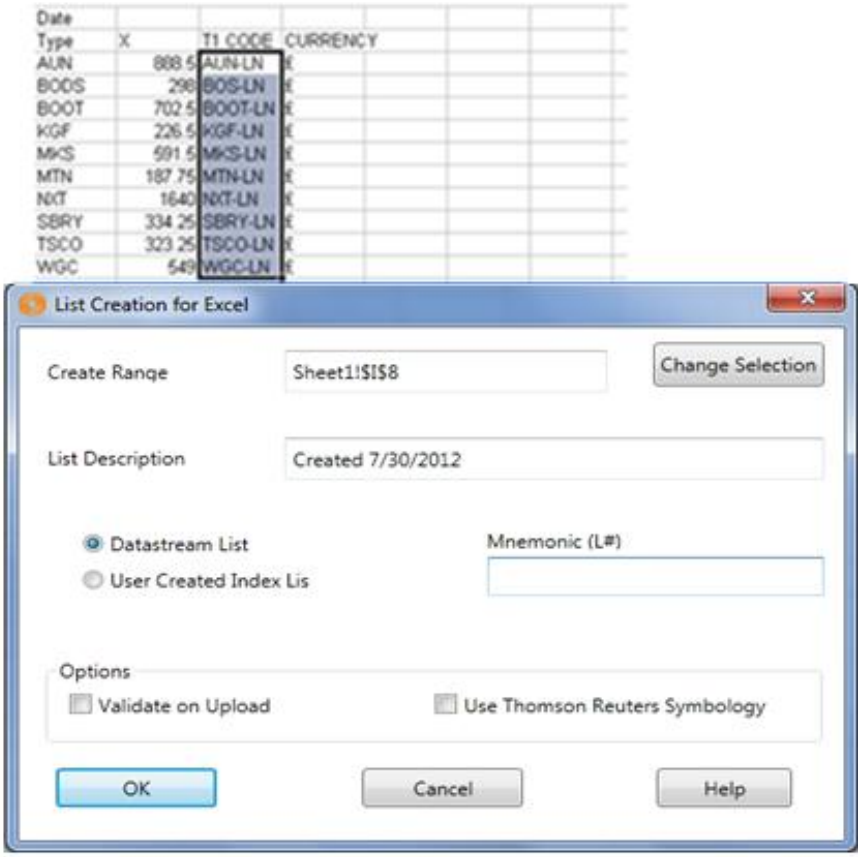
3 USING LISTS

CREATING A USER LIST FROM A SET OF CODES (DATASTREAM, ISINS, SEDOLS, ETC) IN EXCEL (FOR EXAMPLE FROM A BACK OFFICE SYSTEM)

To create a local list:

1. Select **Create List (from Range)** from the **Thomson Reuters Datastream** menu.
2. The **List Creation for Excel** dialog is displayed.



3. Click the **Change Selection** button to display the List's Code Range selection dialog.
4. Specify the series for list creation by highlighting a range of cells or entering the cell range in the input field.
5. Click **OK** button in List's Code Range selection dialog.
6. Select the **L#** (Datastream List) or **X#** (User Created Index List) or **TR#** (Enterprise List) button.
7. Enter List name, note that list mnemonic must start with **L#** or **X#** and not exceed 8 characters.
8. Check the **Validate on Upload** checkbox.

Note: You can also use the **Use Thomson Reuters Symbology** option if using Thomson One (T1) or Reuters (RIC) codes.

9. Click **OK**.

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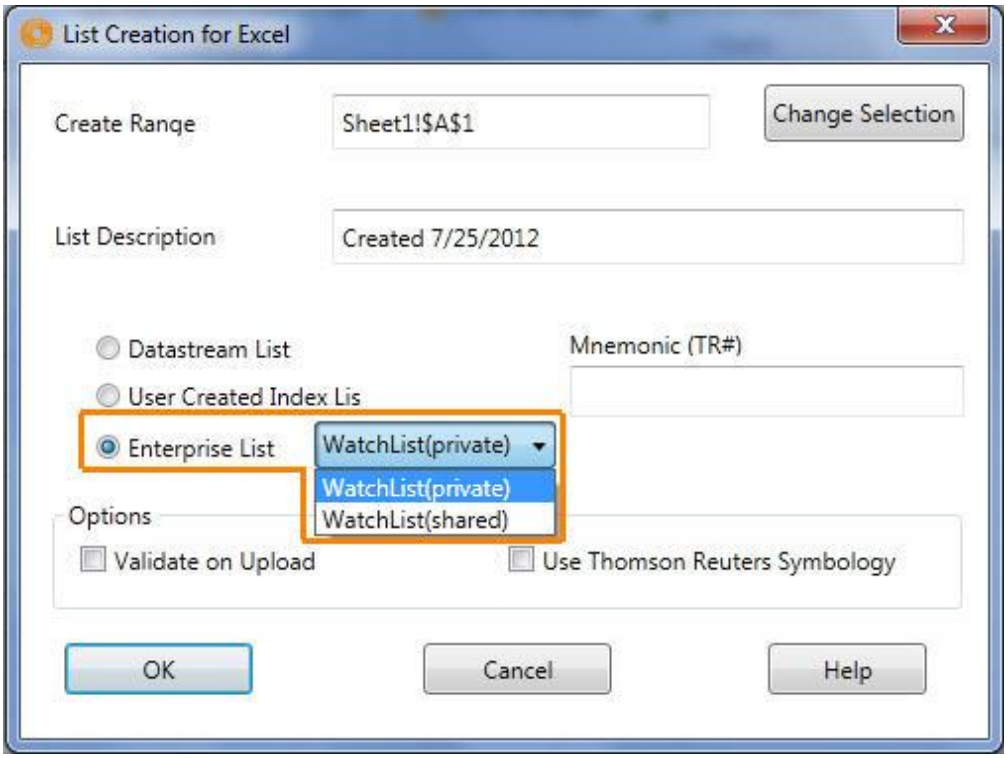
When you have saved your list, the list is stored in the mainframe system, and is available for immediate use.

Note: Enterprise list option is displayed when you login with Thomson Reuters ID.



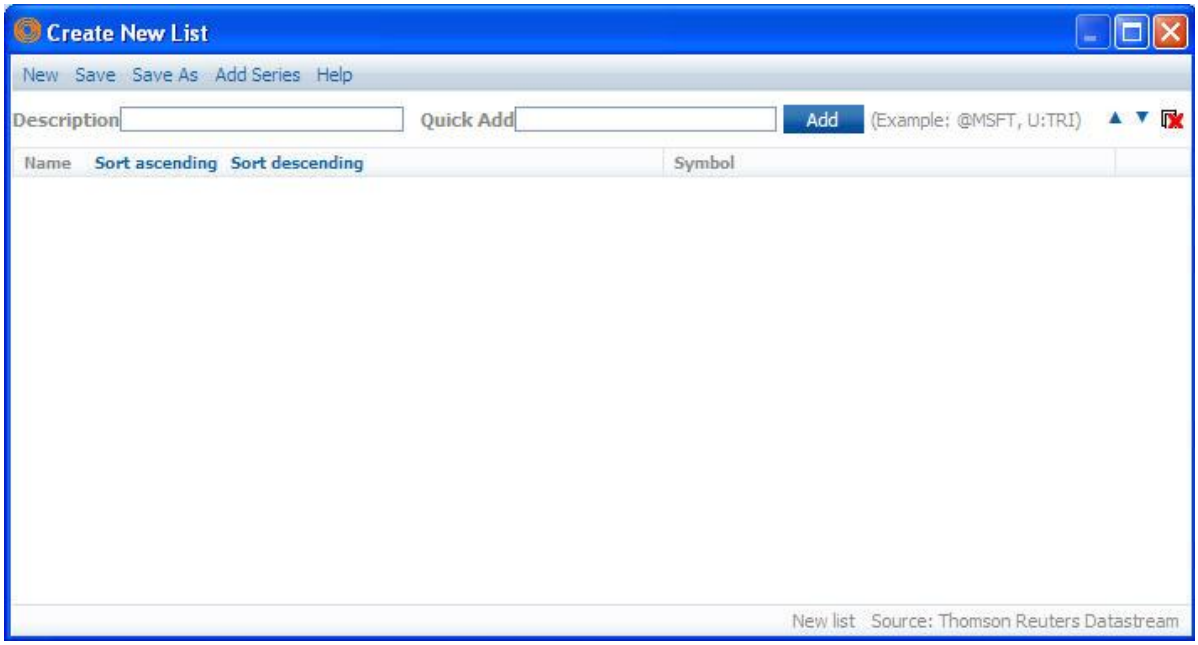
Note: If we create a TR# list with a valid RIC 0005.HK without enclosing in <>, without selecting "Use TR Symbology", with "Validate on Upload" checked ON, you will see a Validation Failed message.

Note: You can also use the **Create List (from Range)** option from **Request Table**.

CREATE A LIST USING NAVIGATOR.

To create new list:

1. Select the **Create List** > **Lists (Create from range)** from the **Thomson Reuters Datastream** menu.
2. The **Create New List** dialog is displayed.



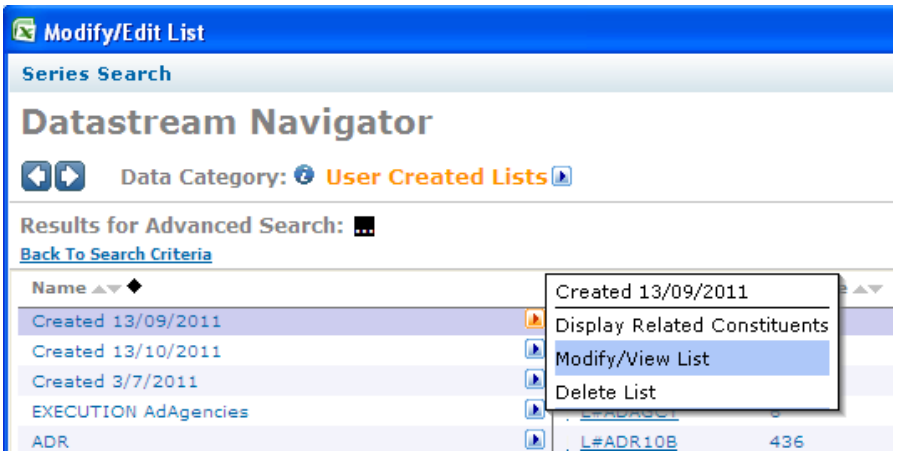
3. Enter list description in **Description** input field.
4. Add series in **Quick Add** input field (multiple codes can be entered separated by commas) or use the Add Series menu option to find series from Navigator.
5. Use the controls at the top right to change the order or delete series.
6. Use the options at the top left to sort the series based in ascending or descending order.
7. Click the **Save** link and enter the **L#** mnemonic to use to retrieve the list.
8. Close the list dialog.

Note:
• If a Datastream maintained or a user list is used the constituents will be expanded out.
• You can also enter expressions – 009E(BARC) and series with datatypes BARC(PE) up to 12 characters.
• In addition to Datastream codes and mnemonics – you can also use other coding systems Datastream supports such as ISINs and SEDOLs (these must be in the form Datastream recognises - UK3134865).

MODIFY AND EDIT LIST

To modify and edit a list:

1. Select the **Modify / Edit List** > **Lists (Create from range)** from the **Thomson Reuters Datastream** menu.
2. The **Modify / Edit List** dialog is displayed.
3. Search the list that you want to edit.
4. Select **Modify/ View list** from the flyout.

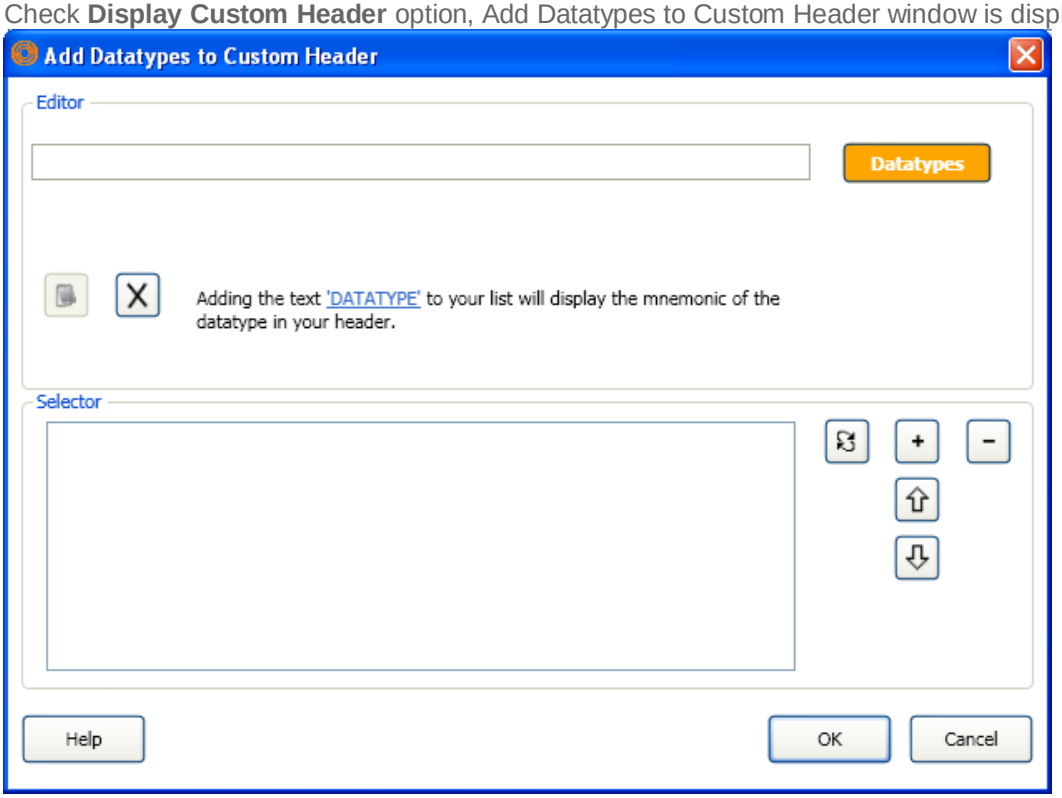


5. Make the necessary changes.
6. Click the **Save** link.

USING CUSTOM HEADER IN TIMES SERIES REQUESTS

In a Time Series request, you can enter custom header for datatypes.

1. Choose **Time Series Request** from the **Thomson Reuters Datastream** menu.
2. Enter the required series and datatypes for the request.
3. Check **Display Custom Header** option, Add Datatypes to Custom Header window is displayed.



4. Click **Datatype**

button for pick the required datatypes to use in the header from Navigator.
5. Click '**DATATYPE**' hyperlink to add the datatype selected for the request in the header.

6. Click button to add datatype to Selector area.
7. Click **OK**.

Other functionalities

- Click this button to delete the text in the Editor area.

- Click this button to view the datatype definition from the Navigator. For functions, this button is not enabled.

- Click this button to replace the selected item in the Selector grid below the text in the Editor area.

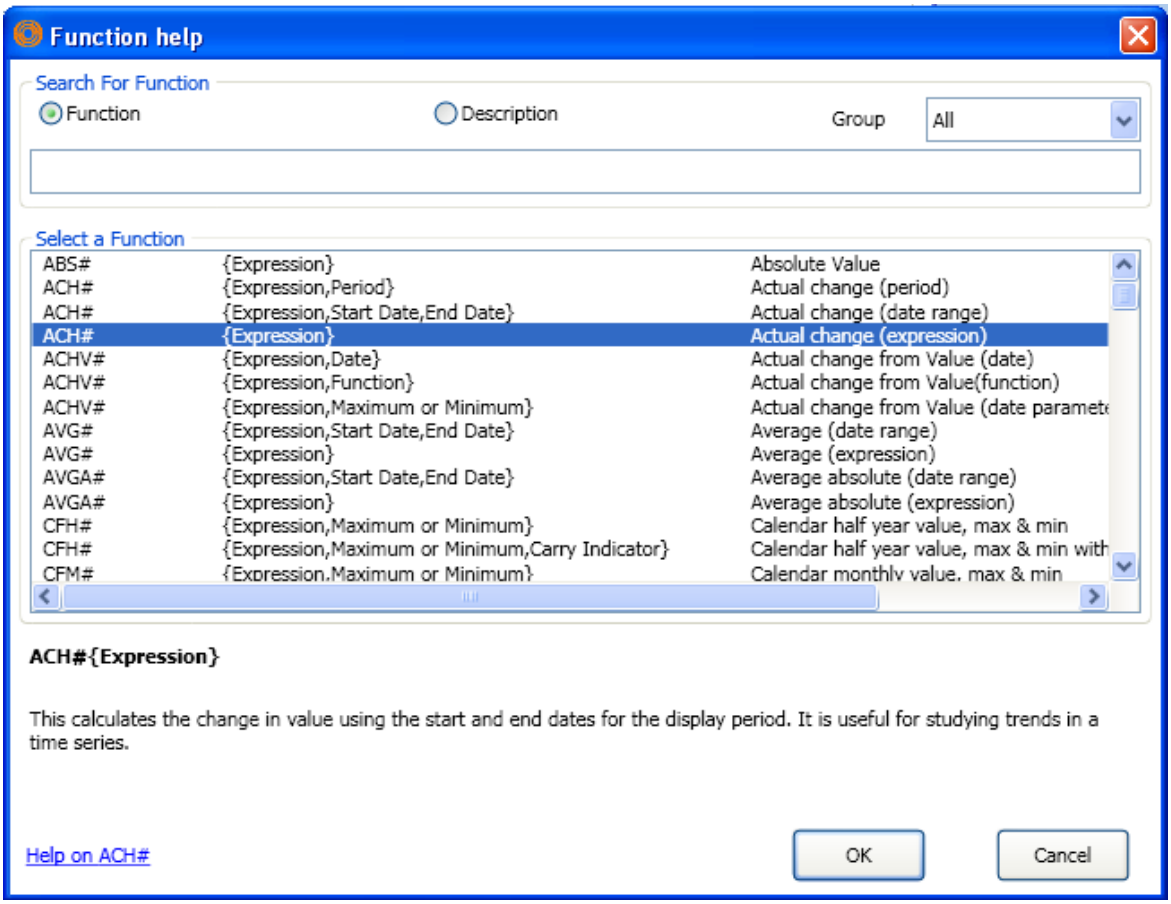
- Click this button to add Editor text as new item in Selector.

- Click this button to delete item from Selector.

- Click these buttons to move items in the Selector up and down.

USING FUNCTION SELECTOR FOR EXPRESSION CREATION

1. Choose **Time Series Request** or **Static Request** from the **Thomson Reuters Datastream** menu.
2. Click **Function Selector** button , The Function Help dialog is displayed.



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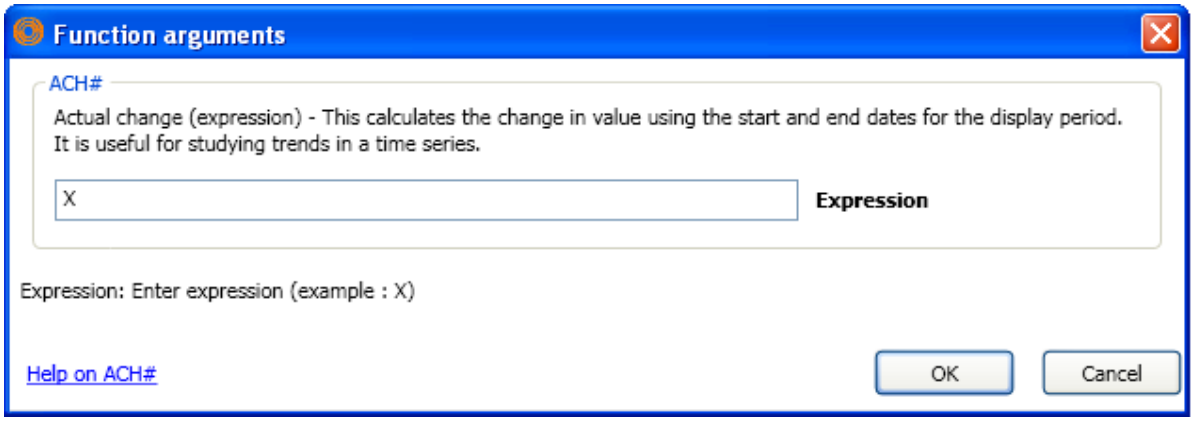
3. Select a function from the list, for example ABS# and click **OK**. You can search for a function either by its Description or by the Group. The Function arguments dialog box is then displayed.



4. Click **OK**, the expression is displayed in Datatypes / Expression text field

   OR

5. If you know the function name already, then you can directly enter the function name in Datatypes/Expressions text field, and can use button for completing the expression.

Note: You can use Help on this function link for more details.

CREATING EXPRESSIONS USING INTELLISENSE FEATURE

Intellisense automatically lists all the available Datastream functions. You can then select one by using the arrow keys and hitting a completion character when the correct member function is highlighted (note this feature can be switched off in the **DFO Options**).

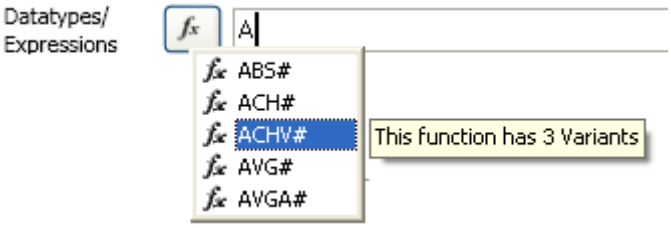
There are two ways you can create or select an expression with Intellisense:

- Using Intellisense feature - Writing directly in Input field, and selecting expression.
- Using Datatypes / Expressions Editor dialog.

Using Intellisense feature

Note: You can enable and disable **Intellisense** option from **Options** dialog.

1. Choose **Time Series Request** or **Static Request** from the **Thomson Reuters Datastream** menu.
2. Enter a function name manually followed by an opening bracket - eg. VAL# .
3. Then enter a datatype before a function (eg. NAME, VAL#( ) and enter a comma after the datatype.
4. A dynamic drop down list opens, select and enter the function from the list.



5. Expression parameter popup opens, as shown below

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Note: Using these buttons 1 of 3 you can see the different expression parameters details overloaded.

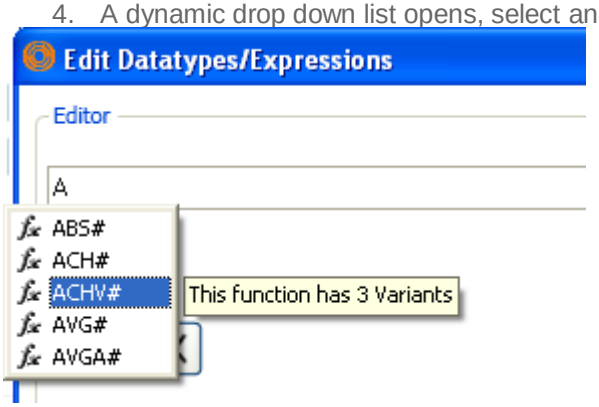
6. You can access **Function** help page by clicking on that particular function link eg. function to know more details.
7. In addition, you can access Function Picker by clicking on the **Function Selector** button to complete your expression.
8. You can enter numeric values and/or maths operators before or after a function (eg. X/100*PCH# or MAV#()+P).

Note: Intellisense functionality is available for both simple and nested functions.

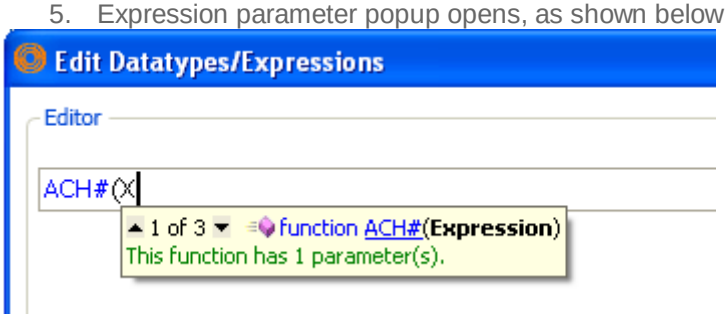
Using Datatypes / Expressions Editor dialog

In a Time Series and Static request, you can enter datatypes and expression using Intellisense.

1. Click the **Editor** button next to the Datatypes/ Expressions textbox in the Times Series dialog. Edit Datatypes / Expressions dialog is displayed.
2. Enter a function name manually followed by an opening bracket - eg. VAL# .
3. Then enter a datatype before a function (eg. NAME, VAL#( ) and enter a comma after the datatype.
4. A dynamic drop down list opens, select and enter the function from the list.



5. Expression parameter popup opens, as shown below



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4 USING EXPRESSIONS

THE EXPRESSION PICKER

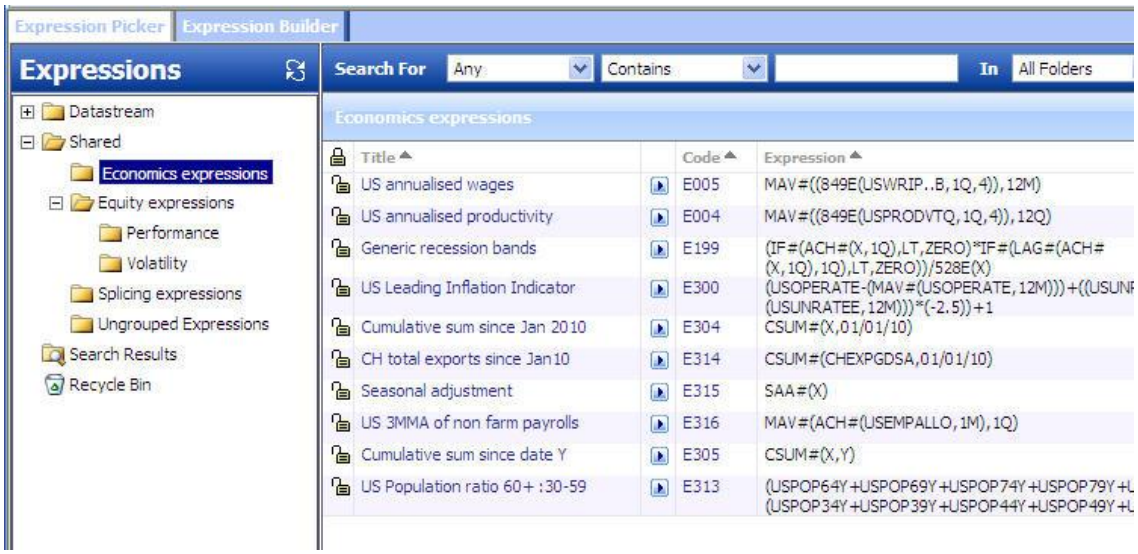
Several hundred useful pre-formatted Datastream expressions are available in the Expression Picker, together with any user created expressions saved on your Datastream logon ID.

To select a stored expression:

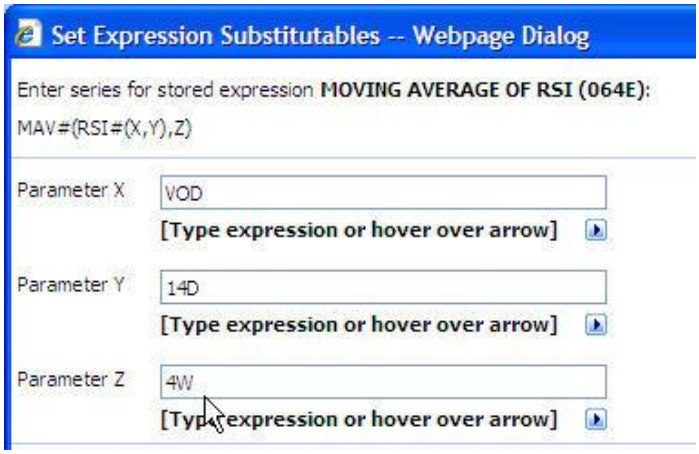
Alternatively, you can also access **Expression Picker** via **Expression Build** button from **Thomson Reuters Datastream** menu.

To find a stored expression:

1. Click the **Expression Builder** button from **Thomson Reuters Datastream** menu.
2. The **Expression Builder** will open in a new window.
3. Click the **Expression Picker** tab.



4. Select the expression you require by clicking the hyperlinked title or code.
5. If the expression contains any symbolic variables, specify the series or parameters you wish to use.



For more on the **Expression Picker**, Click the **Help** icon available on the **Expression Picker** window.

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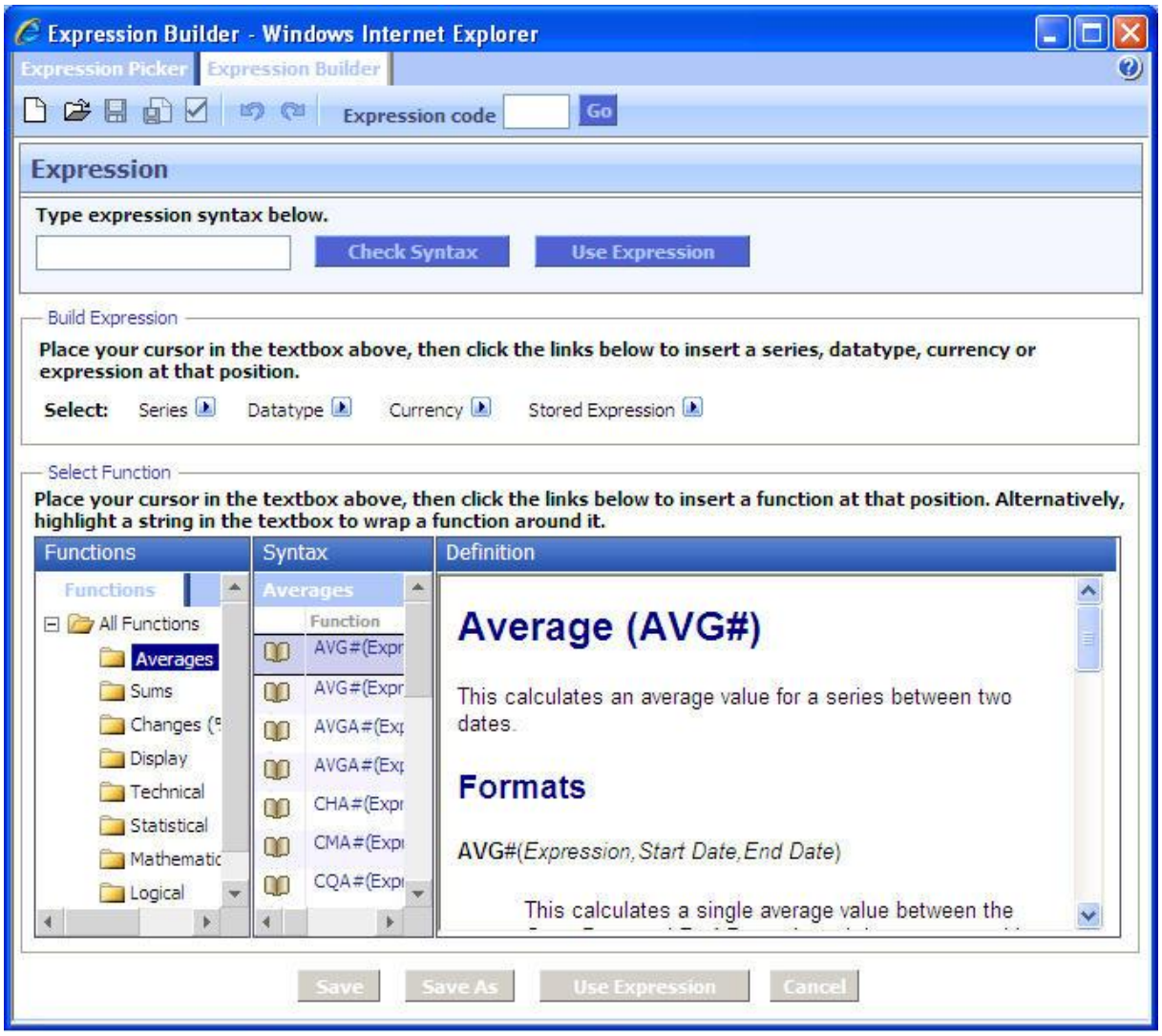
USING THE EXPRESSION BUILDER

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

Creating a new expression

1. Click the **Expression Builder** button from **Thomson Reuters Datastream** menu.
2. The **Expression Builder** will open in a new window.



3. If necessary, click on the **Create New Expression** icon on the toolbar.
4. If you know the syntax you wish to use, type it in the text box and press Enter.
   Alternatively, you can build your expression using the tools and links displayed. For more on this, see **Creating a new expression** or click the **Help** icon in the **Expression Builder** window.

For more on the **Expression Builder**, Click the **Help** icon available on the **Expression Builder** window.

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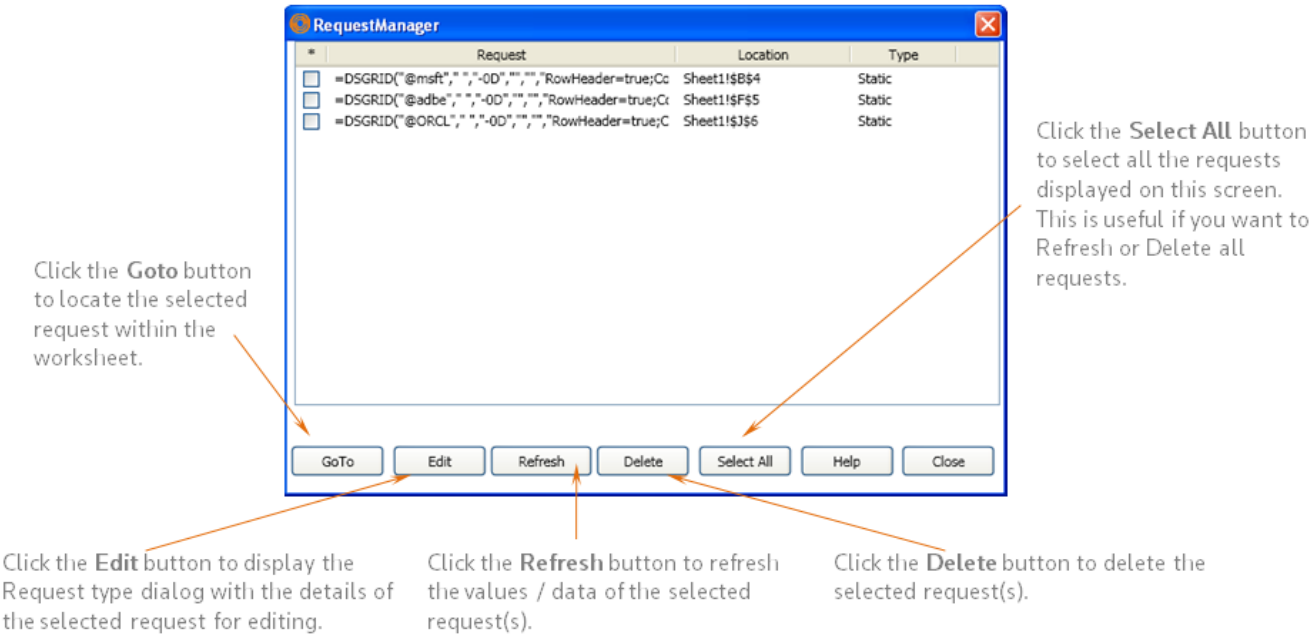
5 USING THE REQUEST MANAGER

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

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



Each detail line of the Request Manager dialog represents one request. The details include the mnemonics of the series, the cell/row location in the worksheet and the type of request.

Buttons

GoTo - click to locate the highlighted request within the worksheet.

Edit - click to display the Request Type dialog with the details of the highlighted request for editing.

Refresh - click to refresh the values/data of the highlighted request(s).

Delete - click to delete the highlighted request(s).

Select All - click to highlight all the requests displayed on this screen. This is particularly useful if you want to Refresh or Delete all requests.

6 USING THE REQUEST TABLE

WHAT IS THE REQUEST TABLE?

If your use of Excel involves building models using several requests for data from Datastream, you can use the Request Table to administrate and edit these refreshable data requests. The request table is an Excel template with additional facilities for entering request parameters as individual Excel rows.

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

- Enable/disable individual requests when they are required/not required.
- View the details of all requests in one glance.
- Reference request input parameters from other worksheets.
- List requests in the table in the order they need to be processed (to use returned values as input parameters in subsequent requests).
- Specify different cell and worksheet references for individual requests.
- Schedule the request table to be processed in the future and 'out of hours'.
- Continue processing, even if a datatype within a list of datatypes is invalid.
- Enter a description against each row in the table.
- Select a range of cells with Datastream codes, SEDOLs, ISINs or other Codes that Datastream recognises and create a local list or Datastream list (L#).
- Switch ON or OFF the Autorefresh option as required.
- Click OK to save the Request Table. This message is displayed when you check the Display Message when updating to later version option in the Options window.
- Specify whether the request should be refreshed when the worksheet is opened.
- The chart request type enables Excel models, with data values and charts referencing a series in a cell, to be updated when the Request Table is processed.
- On completion: refresh all Datastream Charts, refresh all Datastream Chart templates or upload all the time series in a combined Request Table/UCTS sheet.
- Update the series to be used in a central system (mainframe L#) list.
- Update a mainframe L# list (specified in an A format code) by re-running the associated Equity search from the Desktop interface.
- Suppress the comments in the top left cell of requests.
- Specify the "not available" string to use in each Request Table.
- Enable Sequencing allows the output from one request – such as the sector index mnemonic for and equity to be used as the input for the next request – this can be done for all or selected requests.

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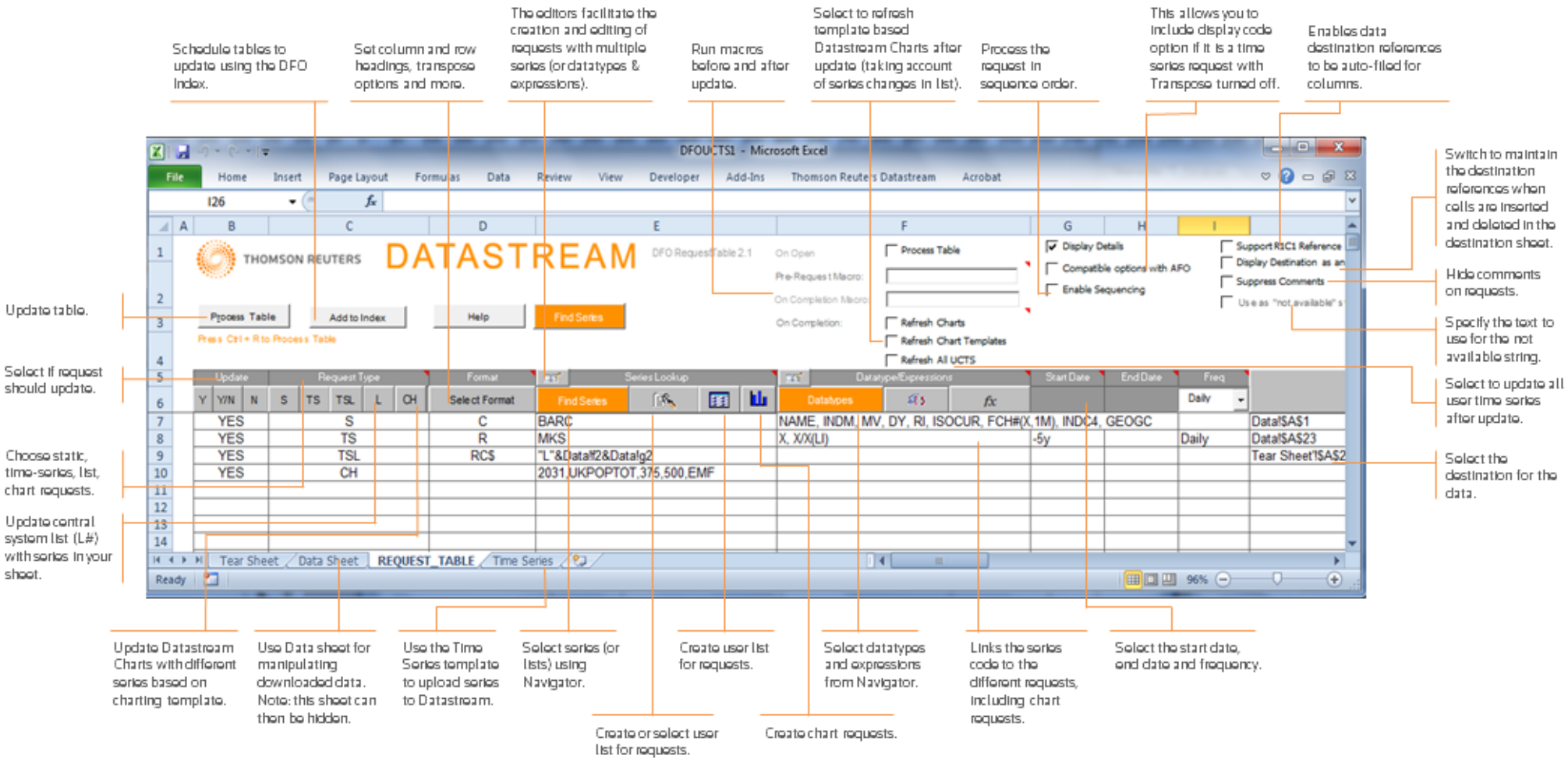
These parameters include:



REQUEST TABLE PARAMETERS

The request parameters available in Request Table include:

- Add the current request to the DFO Index.
- Options to set macros to run before and after the requests have been updated.
- Series picker and List picker buttons can be moved to the result sheet. Series and lists can be changed in the result sheet itself and the change is reflected in Request Table also.
- Format cells as General rather than text. Enables links to other cells.
- You can use Process Table option for running the workbook when opened.
- You can specify a “no data” string at the Request Table.
- You can use "Suppress Comments" to hide comments in the Request Table.
- You can use " Refresh Charts" to refresh Datastream Charting charts as well as DFO created charts via the Request Table.
- You can use "Refresh Templates" to run Datastream Charting templates via the Request Table.
- You can amend the contents of an L# list then upload them so they can be used in subsequent transactions in the Request Table.
- You can enable and disable the Ctrl+R functionality for Request Table.
- You can use Date Cell Reference from Request Table.
- You can use Hyperlink to Metadata and Hyperlink to Datatype Definition from Request Table.
- You can use Expression Editor via Request Table.
- You can use specify a “no data” string at the Request Table level as well as the global/PC level.
- You can upload all UCTS automatically after processing a Request Table.
- Copy a code button onto work sheets to access the series/datatype lookup.
- YES or NO allow you to set request to YES or NO rather than toggle from Yes to No.
- Functionality to update mainframe L# lists.
- Request Table and UCTS templates merged to allow existing RT sheets to be converted to merged template.
- You can process all request in sequencing order or selective sequencing order.
- Process Chart request for more information, see Using Chart Request.
- You can now cancel a request table during entire RT Processing.

Date Parameters supported in the Request Table

Date	Parameter	Time Series Start Date	Time Series End Date	Static
Base Date	BDATE	YES		
Start of Week	SWDATE	YES		
Start of Month	SMDATE	YES		
Start of Quarter	SQDATE	YES		
Start of Year	SYDATE	YES		
End of Week	WKE	YES		YES
End of Month	MTE	YES		YES
End of Quarter	QTE	YES		YES
End of Year	YRE	YES		YES
Latest Value	LATEST VALUE		YES	YES
Intraday Value	TODAY		YES	YES
Last Value	TIME		YES	YES

CREATING A SET OF REQUESTS

To create a set of requests in a Request Table:

Note: You can insert the resulting data, using Data Destination, into several worksheets within the same or different workbooks.

1. Select the **New Request Table** option from the **Thomson Reuters Datastream** menu.
2. You are now prompted to save the request table under a new name. Click **Yes**, supply the Request Table name and directory location, and click **Save**.

Note: It is important that you do not overwrite the default Request Table template (Office 2007 and above DFORequestTable.xltm) as this will form the basis for all your Request Table generation. We recommend that you take a back up of the template, which is installed with Datastream in the location: C:\Program Files\Datastream\Datastream DFO Add-In.

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

1. Click on the worksheet tab labelled **Request Table**. An empty Request Table is displayed.
2. Click the **Y**, **Y/N or N** button to select the **YES** option - that is, refresh this request. This option can be turned off by clicking the **Y/N** button again, where the cell contents will change to **NO**.
3. Select a Request Type by clicking the appropriate button. The buttons are:
   - **S** = Static data request
   - **TS** = Time series data request

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- **TSL** = Time series list data request
- **L =** List update
- **CH** = Chart Request

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

Format options	Worksheet codes
No headings	**X**
Row and column headings	**RC**
Titles with row and column headings	**RCH**
Titles with row headings	**RH**
Row and column data transposed with no headings	**T**
Row and column data transposed with row headings	**TR**
Row and column data transposed with column headings	**TC**
Row and column data transposed with row and column headings	**TRC**

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

5. Select series or lists (i.e Datastream mainframe lists and constituent lists) using the Series Lookup buttons. If the Request Type you selected is S or TS, click the Series Navigation button to display the Series Selection screen (see Selecting Series). You can select any number of series. If the Request Type you selected is TSL, click the List Picker button to display the List Picker (see Selecting lists).
6. Select a datatype, expression, or search format (created in the Datastream interface) by clicking the appropriate button. If you have selected Request Type S, you can select datatypes (see Selecting Datatypes) and expressions (see Selecting Expressions). If you have selected Request Types TS and TSL you can only select datatypes. If you have selected Request Type SCH, you can select the search format.
7. Place the cell cursor in the next adjacent cell, e.g., G7, and enter either a fixed start date in the form dd/mm/yy, a relative start date in the form -nY (that is n years ago from the End Date). For static data requests, this field is used to specify the date for which the data is to be requested.
8. Place the cell cursor in the next adjacent cell, e.g., H7, and specify an End Date in either a fixed date or relative end date format. This date is only needed for time series requests and can be left blank to specify previous day values.
9. Place the cell cursor in the next adjacent cell, e.g., I7, and select a data frequency from the dropdown list. The options are:
   - Daily
   - Weekly
   - Monthly
   - Quarterly
   - Yearly
10. Place the cursor in the next adjacent cell, e.g., J7. The next step is to specify where the result of the data request is to be inserted. This can be a specific cell location in any new worksheet within the same

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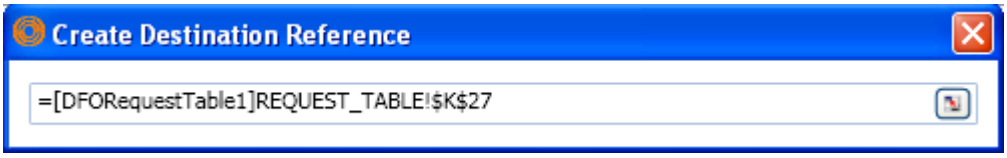
workbook, or a specific cell location in a different workbook. To specify a cell location in a worksheet within the same workbook:

- Insert a new worksheet from the Insert menu.
- Click on the **Request Table** tab
- With the cell cursor at J7, click the **Data Destination** button. The **Create Destination Reference** screen is displayed. Click on the required worksheet tab and then click on the required cell location to automatically paste the cell reference into the dialog, for example:



- Click **OK** to insert the cell reference into the request table.

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

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

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

12. Skip the cell column for Status as this is used by Datastream to inform you of the status of the latest update of this request. OK indicates the update has been successful.
13. Place the cursor in the next adjacent cell, e.g., L7, and enter a short (optional) description for the request.
14. From the Excel File menu, select Save to save the details of your Request Table.

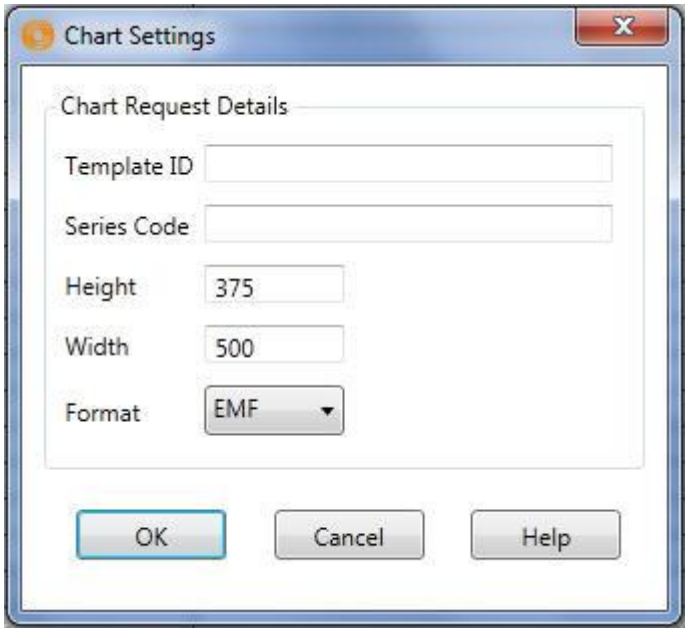
The request is now ready to be processed.

USING CHART REQUEST

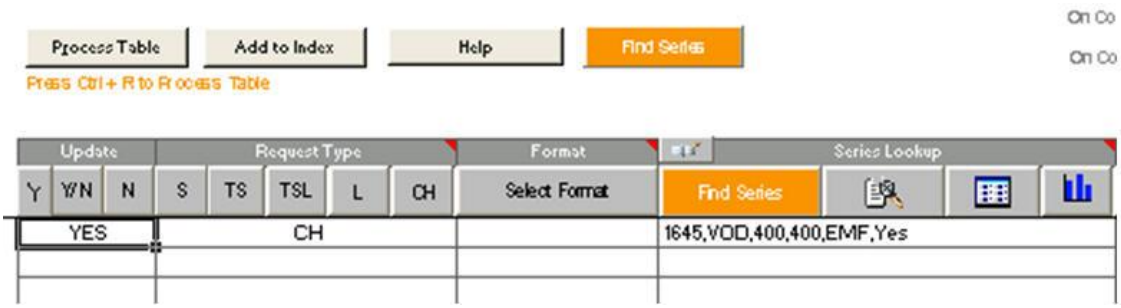
1. Select the New Request Table option from the Thomson Reuters Datastream menu.
2. You are now prompted to save the request table under a new name. Click Yes, supply the Request Table name and directory location, and click Save.
3. Click the Yes/No button to select the YES option - that is, refresh this request. This option can be turned off by clicking the Yes/No button again, where the cell contents will change to NO.
4. In Request Type cell, click the CH button.

Note: The **Format** option is not applicable for the Chart request.

5. In the Series Lookup cell, select the Chart Setting button.



6. The Chart Settings dialog is displayed.
7. Set the option in the dialog including the template ID (this can be found next to the template in the Datastream Charting template library).
8. Click the **OK** button.



9. Click the Process Table button.

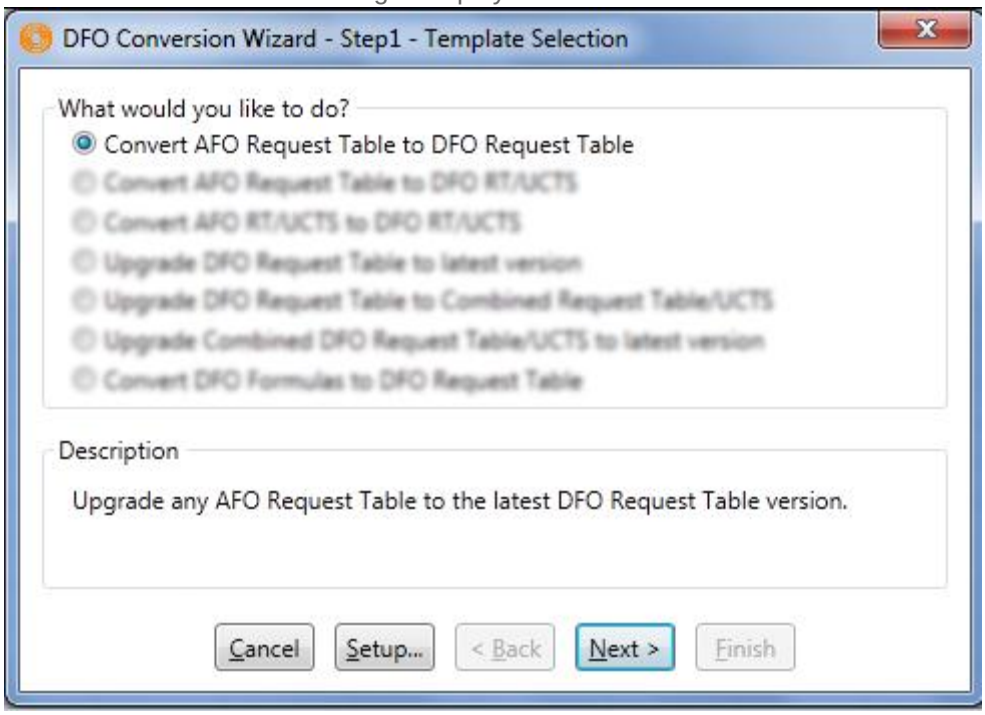
Notes:

- You can only entry one series in Series code.
- Template ID should be numeric.
- Height & Width are in pixels.
- Image file format supported are EMF , WMF & PNG
- Syntax for Chart Request is (TemplateID,Series,Height,Weigth,Format) where TemplateID and Series are mandatory field. For example: 7621,VOD,400,400,emf Note – the code must be uppercase.
- If the series is to be linked to a code in a cell – an Excel formula must be used="7621,"&Sheet1!L1&",375,500,EMF"

CONVERTING AFO REQUESTS TO DFO REQUEST TABLES

1. Select **Conversion Wizard** from the **Thomson Reuters Datastream** >**New Request Table** menu.

2. **DFO Conversion Wizard** dialog is displayed.



3. Select the **Convert AFO Request Table to DFO Request Table** option.

4. Click Setup to display the setup screen. Enter the path on your PC where the Datastream for Office (DFO) Request Table template (DFORequestTable.xltm) resides and click the Backup option check box.
5. Click **OK** to close Setup options.
6. Click **Next**.

7. Click **Add** and navigate to where the Excel workbooks that contain the AFO embedded links are located. Select the required .XLS workbooks and click OPEN. The workbooks you have selected appear in the conversion wizard.

8. Click **Next** and then click **Finish**.

9. You are now asked to confirm the conversion. Click **OK**. The conversion process now starts.

10. When the conversion process is complete, the message appears - Finished, no conversion errors encountered. Click **OK** to quit the Conversion Wizard.

Similarly, you can also:

a. Convert AFO Request Table to DFO RT / UCTS
b. Convert AFO RT / UCTS to DFO RT / UCTS
c. Upgrade DFO Request Table to latest version
d. Upgrade DFO Request Table to Combined Request Table/ UCTS
e. Upgrade Combined Request Table / UCTS to latest version
f. Convert DFO Formulas to DFO Request Table

Note: Destination cell that was selected using “Set Destination Cell” option will not be retained in the Find Series control of Request table when AFO RT is converted to DFO RT.

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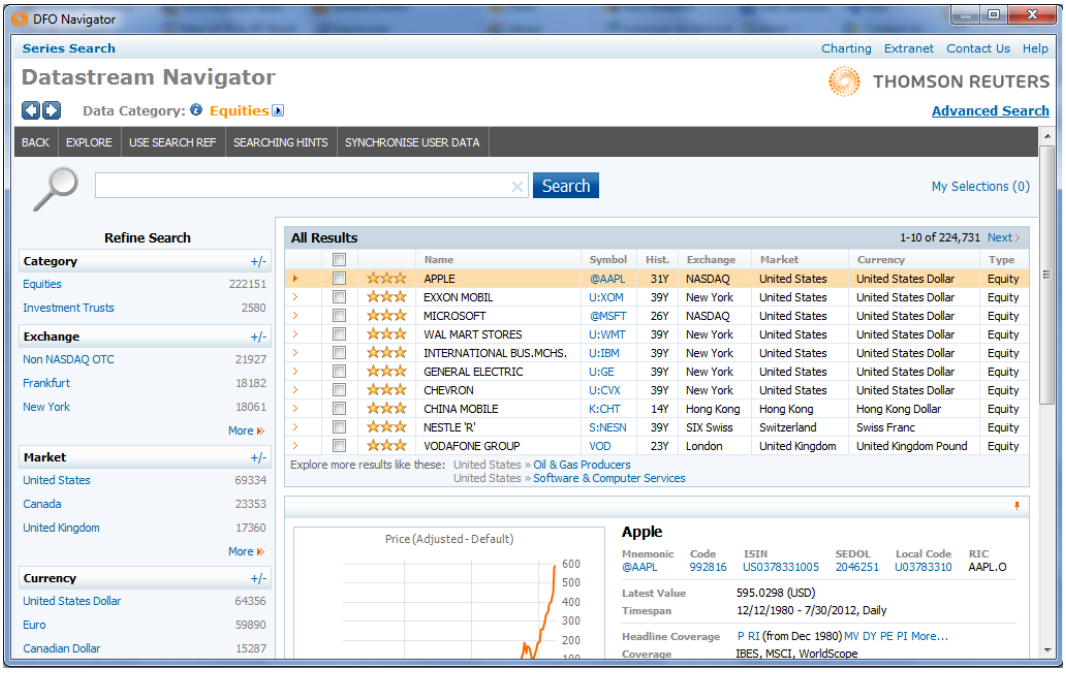
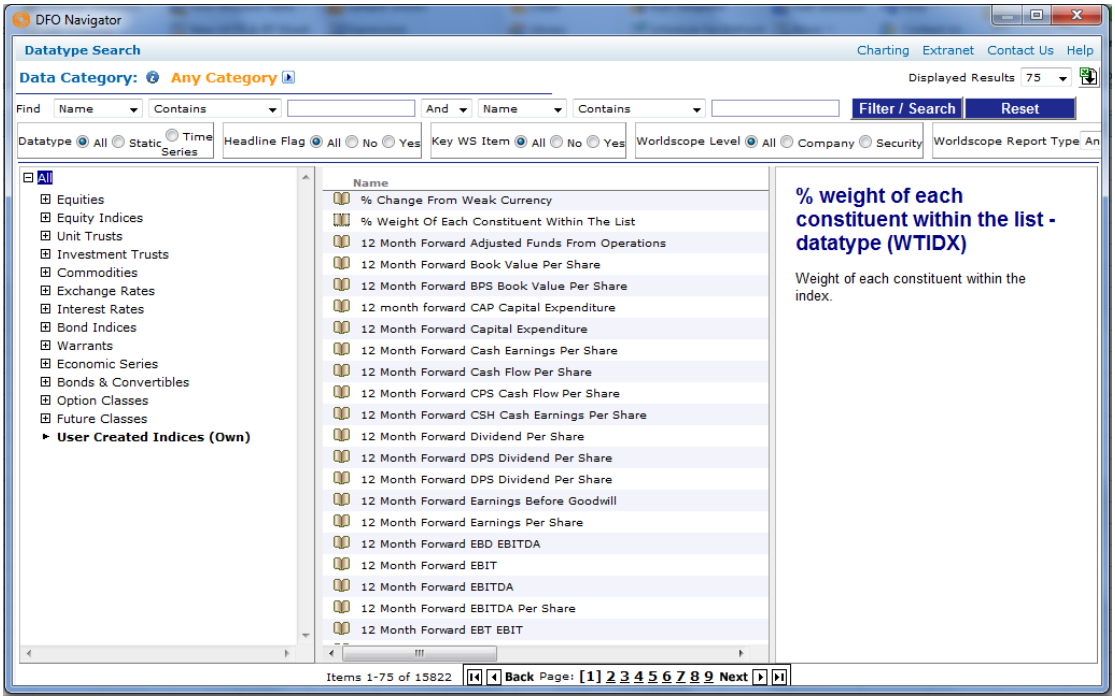
THE SERIES AND DATATYPE NAVIGATION BUTTON

You can link the **Series Navigation** Find Series and **Datatypes Navigation** Datatypes button to a cell in the Request Table, giving you access to the Datastream series and datatypes selection dialogs (for all series including user lists). Double click on the **Series Navigation button** on the spreadsheet to select a different series.



Note 1: You can use Advanced Search option for to searching a series that match very specific criteria.
Note 2: For more on the Datastream Navigator, Click the **Help** link available on the Datastream Navigator window



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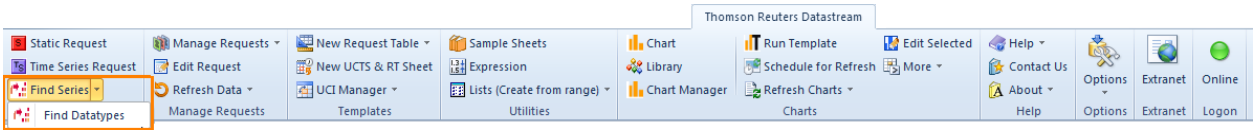
Alternatively, you can also access **Find Series** and **Find Datatypes Navigation** from **Thomson Reuters Datastream** menu.



SEARCH FOR DEAD CODES

You can search dead code in worksheet or active sheet

Search for Dead Codes in worksheet

1. Submit a **Static Request** or **Time Series Request** from the **Thomson Reuters Datastream** menu.

Note: Make sure the Hyperlink to Metadata box is checked.

The results are displayed in the spreadsheet with row and column headings (if selected). A hyperlink is added to the series code and when clicked links with the Navigator Classifications and Metadata page for the series.

2. Select **Thomson Reuters Datastream** >**Manage Requests** >**Search for dead codes – Active Sheet**. The series that are now dead or inactive are identified and displayed in the same worksheet in red as shown below:

	A	B	C	D
1				
2	Date			
3	Type	EARNINGS PER SHR	MARKET VALUE	P
4	MKS	33	5704.25	360
5	D:ARQ@	0	344.23	5.57
6	TRIL	122.02	3428.86	1892
7	BARC	12.4	36791.59	302
8				

Search for Dead Codes in workbook

1. Submit a **Static Request** or **Time Series Request** from the **Thomson Reuters Datastream** menu.

Note: Make sure the Hyperlink to Metadata box is checked.

The results are displayed in the spreadsheet with row and column headings (if selected). A hyperlink is added to the series code and when clicked links with the Navigator Classifications and Metadata page for the series.

2. Select **Thomson Reuters Datastream** >**Manage Requests** >**Search for dead codes - Workbook**

The series that are now dead or inactive are identified from the entire workbook and the combined result is displayed in a new worksheet Datastream dead codes as shown below:

A	B	C	D	E
code	name	status	address	
542573	£.SVG.AS.UNT.99/99	Dead	Sheet2!$D$6	
14580J	@ROAD (XET)	Dead	Sheet2!$D$7	
D:ARQ@	@ROAD (FRA)	Dead	Sheet2!$D$8	
ICI	IMPERIAL CHM.INDS.	Dead	Sheet1!$B$10	
542573	£.SVG.AS.UNT.99/99	Dead	Sheet3!$A$3	
14580J	@ROAD (XET)	Dead	Sheet3!$A$4	
D:ARQ@	@ROAD (FRA)	Dead	Sheet3!$A$5	
ICI	IMPERIAL CHM.INDS.	Dead	Sheet3!$E$13	
ICI	IMPERIAL CHM.INDS.	Dead	Sheet5!$A$4	

Sheet1 | Datastream dead codes | Sheet2 | Sheet3

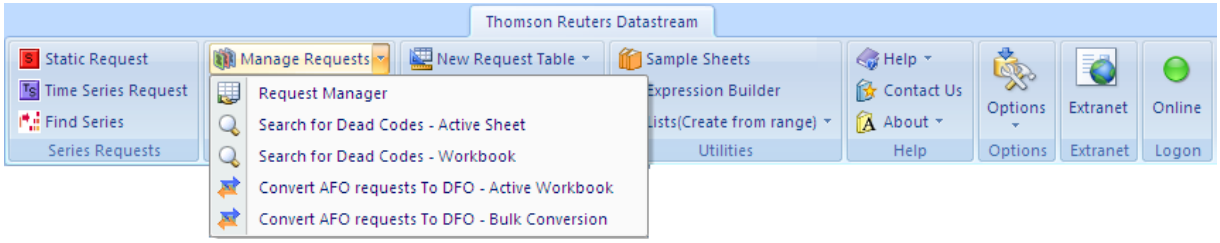
Set Hyperlink to Metadata as a default option

1. Choose **Options** from the **Thomson Reuters Datastream** menu. The **Options** dialog is displayed.
2. Select the **Hyperlink to Metadata** checkbox and click **OK**.

CONVERT AFO CONTROLS TO DFO FORMULAS

Note: You need to have AFO installed on your machine (but there is no need for it to connect to Datastream) for conversion to take.

1. Select **Convert AFO to DFO** from the **Thomson Reuters Datastream** > **Manage Requests** menu.



2. Click **Next**.
3. Click **Add** and navigate to where the Excel workbooks that contain the linked DDE requests are located. Select the required .XLS workbooks and click OPEN. The workbooks you have selected appear in the conversion wizard.
4. Click **Next** and then click **Finish**.
5. You are now asked to confirm the conversion. Click **OK**. The conversion process now starts.
6. When the conversion process is complete, the message appears - Finished, no conversion errors encountered. Click **OK** to quit the Conversion Wizard.

CALCULATION MODE

You can prevent Thomson Reuters Datastream Add-In from updating data or adding new values by turning the calculation mode from Automatic to Manual. When you are in Manual calculation mode, no values on your spreadsheet update.

For example, you can use Manual calculation mode if you are making changes to an expression but do not want the values to update in it or if you want to add a data item to your spreadsheet but do not want values to accompany the data item.

If you process a request while you are in Manual calculation mode, the value displays "Manual Calculation."

While you are in Manual calculation mode, you can refresh selected cells, the active worksheet, or the entire workbook. After you refresh, the items that displayed "Manual Calculation" change to the updated values.

The default calculation mode is Automatic.

When you save a workbook that is in Manual calculation mode, no values update.

To turn off Automatic calculation mode

1. On the **Thomson Reuters Datastream** menu, select **Automatic Calculation** from **Refresh Data** drop down.

2. To refresh a cell or multiple cells while in Manual calculation mode, highlight the cells, go to the **Thomson Reuters Datastream** menu, select **Refresh Selected Cell(s)** from **Refresh Data** dropdown.

3. To refresh the active worksheet while in Manual calculation mode, go to the **Thomson Reuters Datastream** menu, select **Refresh Active Worksheet** from **Refresh Data** dropdown.

4. To refresh the entire workbook while in Manual calculation mode, go to the **Thomson Reuters Datastream** menu, select **Refresh Entire Workbook** from **Refresh Data** dropdown.

5. To return to Automatic calculation mode, go to the **Thomson Reuters Datastream** menu, select **Automatic Calculation** from **Refresh Data** drop down.

THE DFO INDEX

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

Using the DFO index with a 3rd Party scheduler

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

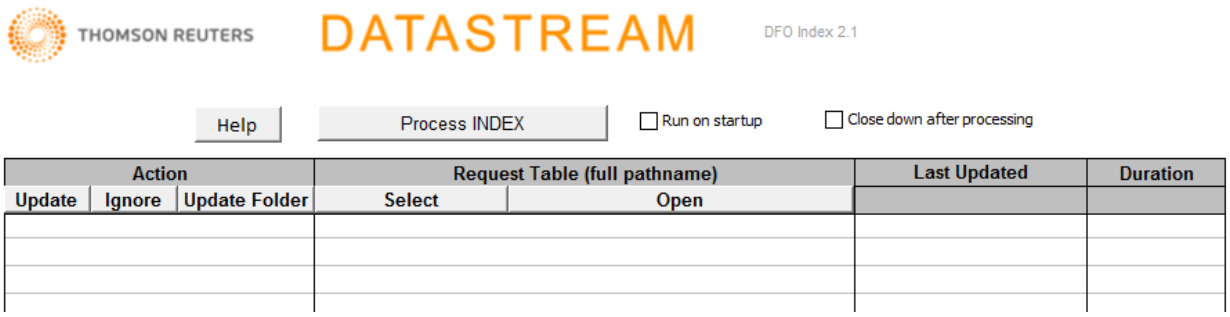
To use the DFO Index:

1. Choose **Request Table** from **Thomson Reuters Datastream** menu.

2. Click the **Add to Index** button.

3. Add to DFO index message box is displayed. Click **Yes** button to add the current Request Table to DFO Index or Click **No** to cancel.

   DFO Index is opened.



4. Click the **Update** button to select the Update option - that is, refresh this request. This option can be turned off by clicking the Update button again, where you do not want to refresh select **Ignore** button.

5. Select Request Table path, by clicking **Select** button, then browse, and select **xls** files.

6. Check the **Close down after Processing** checkbox if you want to close DFO Index file after the process is completed. (this optional)

7. Check the **Run on Startup** checkbox if you want to run the DFO Index when opened. (this optional).

Note 1: If your **User Account Control** (UAC) is high in Windows Vista and above operating system you will not be able to save Index spreadsheet in Default location.
Workaround: Save Index spreadsheet in different location and configure the same path in **Options** > **Request URL Settings** dialog.

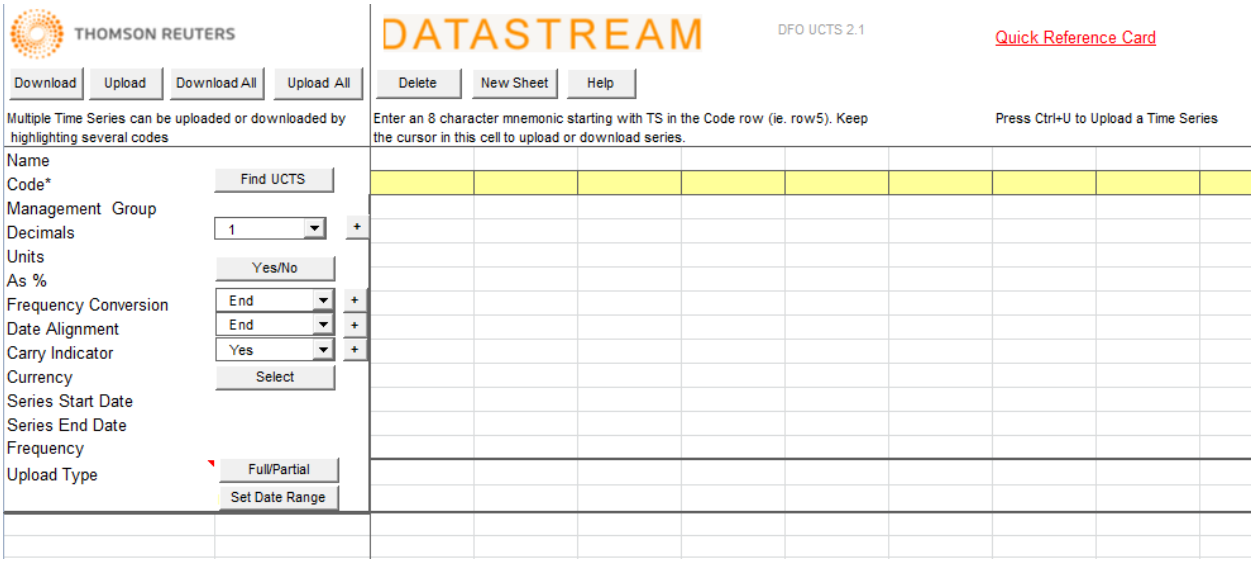
Note 2: The DFO Index only works with request tables.

Note 3: You need to check "**Enable Login on Startup**" option from **Options** dialog before scheduling Index spreadsheet.

USER CREATED TIME SERIES

This workbook also includes a Request table to enable series to be downloaded manipulated - and then uploaded these series back to Datastream to be charted.

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 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 Datastream and DFO.

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, U$ 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 & RT sheet** from the **Thomson Reuters Datastream** 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, example TSUKRPI1.
4. Type the **management group** you want the series to belong to (up to 10 characters) example 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, U$ 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.

Note: You can also use **Upload All** button to upload all of the time series in worksheet, or the **Download All** button to download all the time series.

You can now use this series in Datastream or DFO requests.

EDITING AN EXISTING USER CREATED TIME SERIES

To edit a user created time series:

1. Select **New UCTS & RT sheet** from the **Thomson Reuters Datastream** 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 **Thomson Reuters Datastream** >**Options>Request URL Settings** menu.

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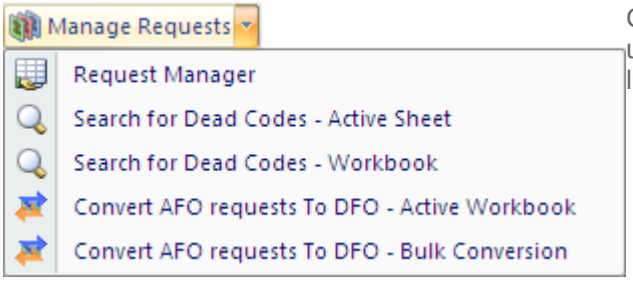
7 USING RIBBON BASED UI FOR DFO (IN MS-OFFICE 2007 AND ABOVE)

When you install Datastream for Office (DFO) **Thomson Reuters Datastream** menu is available as an Add-In tab. Datastream for Office provides following facilities in the form of eight separate groups.

Series Requests:
This group consists of three buttons.

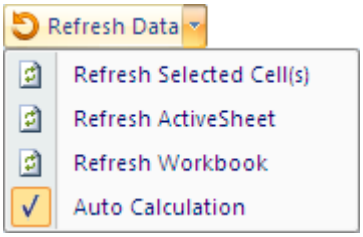
Create a one off or embedded request for a series or list and datatype/expressions at one point in time.

Create a one off or embedded request for a series or list and datatype/expressions over time.



Create requests for fundamentals information and view, update and edit your embedded requests. This drop-down list contains following buttons:

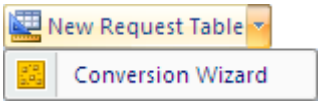
1. **Request Manager:** View, update and edit all requests in your workbook.
2. **Search for Dead Codes – Active Sheet**: Search dead codes in active sheet.
3. **Search for Dead Codes – Workbook**: Search dead codes in active workbook.
4. **Convert AFO to DFO** – Convert AFO embedded control to DFO formula. For more information click here.



You can refresh embedded requests. This drop-down list contains following buttons:

1. **Refresh Selected Cell**(s): Refresh selected cell data request.
2. **Refresh Active Sheet**: Refresh all the data requests in your active sheet.
3. **Refresh Workbook:** Refresh all the data requests in your workbook.
4. **Auto Calculation:** For more information click here.

Request Tables:
This group consists of three buttons.

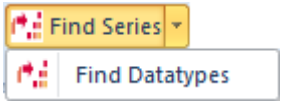


New Request Table: Open a new Request Table to create, manage and update spreadsheets effectively with multiple Datastream requests.

Conversion Wizard: You can convert AFO Request Table sheets to DFO sheets.

Access a library of spreadsheets illustrating how the Datastream content sets can be used in different range of workflows.

Utilities:
This group consists of six buttons.



Find the series and datatype you require, using the extensive facilities available in Navigator and return these values to your spreadsheet.

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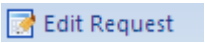
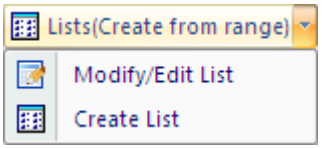
Click to display the interface to calculate and select User Created Indices on your Datastream ID, and the drop down to download the Excel template for specifying or editing the constituents of indices.

View and create the saved expressions on your Datastream ID.

Open a new User Created Time Series.



Edit requests.



Create a central system (l#), or User Created Index (x#) list from Datastream, SEDOL or ISIN codes in a range of cells.

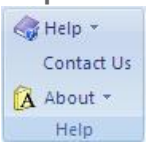
Options

Datastream for Office: Configure a range of settings and defaults to reflect your preferences.

Extranet

Access the Extranet for information on Datastream content and functionality including details of the latest changes.

Help



Access Online help contents, Definitions, Contact Us link and Version details.

Help:

- **Help Contents:** View Datastream for Office - Online help.
- **Help Definitions:** View the syntax for Datastream functions and expression language.
- **User Manual:** View Datastream for Office using Excel manual.

Contact Us: Access Thomson Reuters contact details.

About:

- **Datastream for Office**: View Datastream for Office version details.

Logon

Shows DFO add-in connection status - clicking on the button will connect and disconnection from the Datastream DSWS server.

8 ADDITIONAL NOTES

USING VOLATILE FUNCTIONS

Issue: Using volatile functions such as TODAY() (http://msdn.microsoft.com/en-us/library/bb687891.aspx) directly in DSGRID functions will cause all the DFO requests in the sheet to be refreshed by several unrelated changes to the sheet.

Workaround: Where these functions are used – the entire contents of the datatype/expression field for the request should be concatenated in a single cell, and this cell should be referenced in the datatype/expression field.

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