How to Excel with CUFS

Part 1

Course Manual

Finance Training

UNIVERSITY OF CAMBRIDGE
Finance Division

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1. Extracting Data from CUFS

1.1 Obtaining data by using online enquiries

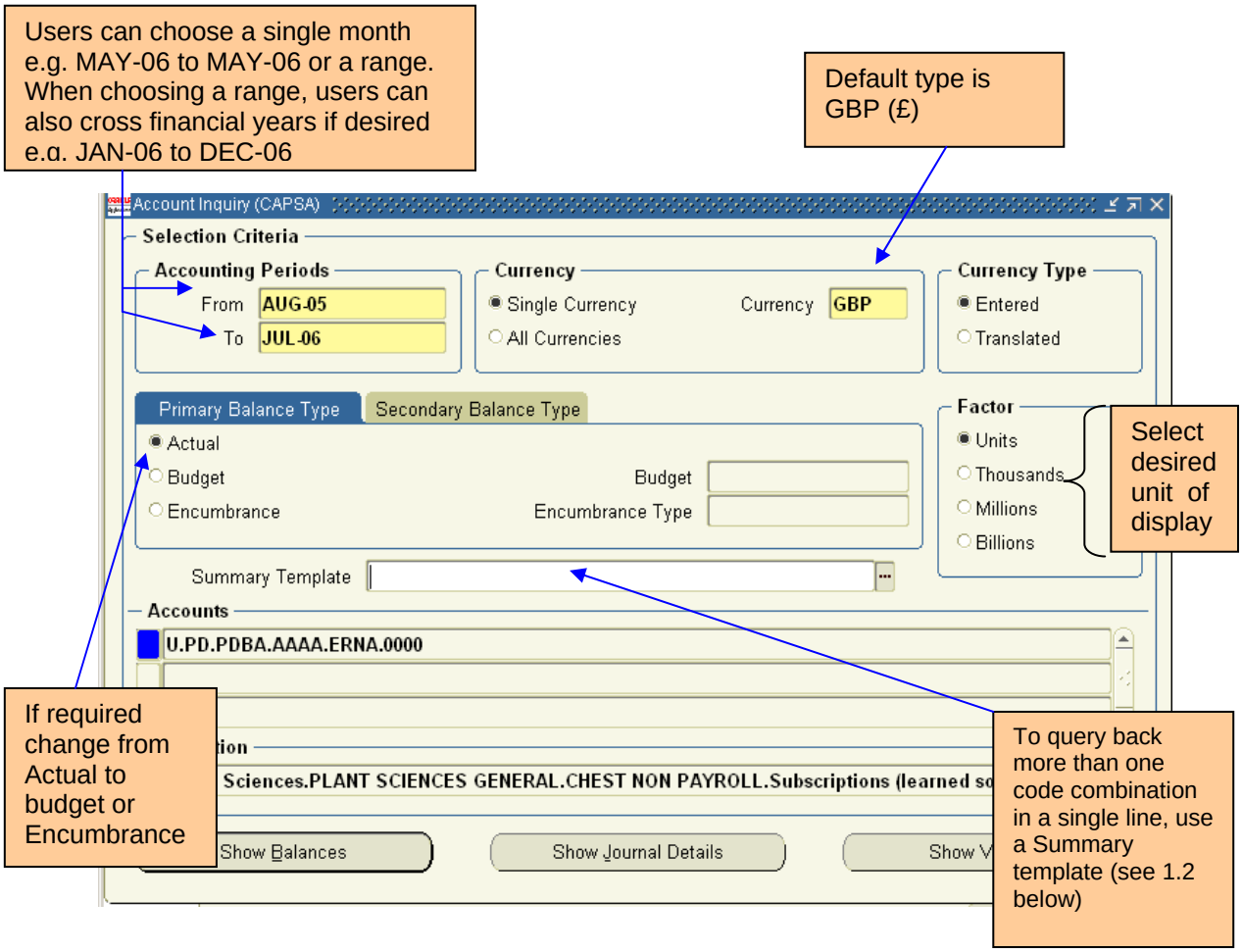
The General Ledger (GL) module allows you to review detailed balances and transactions within your accounts on screen. Online account enquiries can be used for various purposes, such as:

- Reviewing income/expenditure balances on a particular account or range of accounts
- Looking at expenditure against budgets (variances) and then "drilling down". To see the detail behind the balances
- Review invoices posted from Accounts Payable to a general ledger account;
- Look at income posted from Accounts Receivable into trading/donations accounts

In CUFS, from your GL Navigator screen:

Enquiry → Account

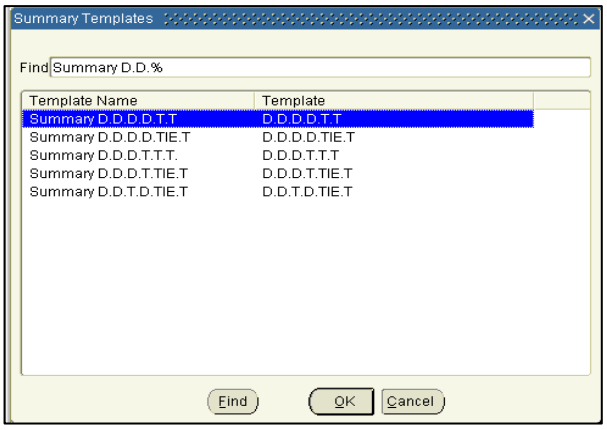
In the Account Enquiry screen you will need to decide whether you want to look at a range of accounts or just one specific account, e.g. U.PD.PDBA.AAAA.ERNA.0000 Fill in the boxes as follows:



1.2 Summary Templates

Templates allow you to group together and obtain balances for the following account code combinations:

- transactions for a particular cost centre and source of funds combination
- all transactions on a particular cost centre
- all transactions on a particular source of funds



Using the highlighted example D.D.D.D.T.T:

Where there is a D, you fill in the codes:

1st D = Entity (e.g. "U" for University)
2nd D = Dept Code(s)
3rd D = Cost Centre(s)
4th D = Source(s) of Funds

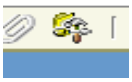
Where there is a T, leave the codes blank, CUFS will retrieve all combinations.

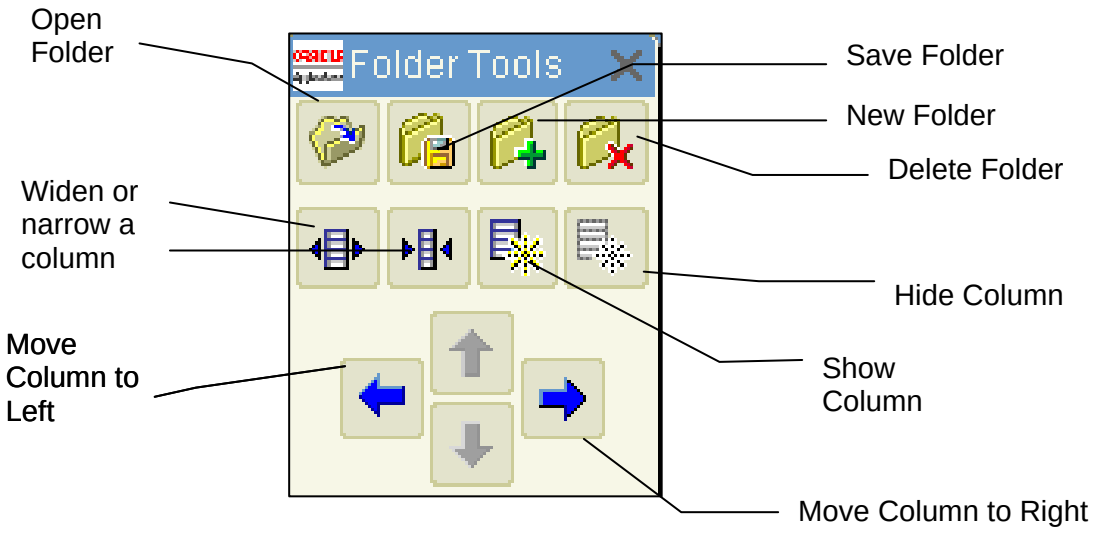
1	**D.D.D.D.T.T.**	This template will select **every transaction code combination** against specified department, cost centre and source of funds codes
2	**D.D.D.D.TIE.T**	**As 1 above**, but further limited to transaction codes for Income and expenditure only (TIE) e.g. transaction codes such as XEAA (brought forward balances) are excluded.
3	**D.D.D.T.T.T.**	This template will select **every source of funds and transaction code combination** against specified department and cost centre codes.
4	**D.D.D.T.TIE.T**	**As 3 above**, but further limited to transaction codes for Income and expenditure only (TIE) e.g. transaction codes such as XEAA are excluded.
5	**D.D.T.D.TIE.T**	This template will select **every cost centre and every income and expenditure transaction code combination** against specified department and cost centre codes. ***Note: Only available for Central Administration users***

Click on the **Show Journal Details** button to view the transactions and use folder tools to customise the view of the data before you export it to Excel.

1.3 Customising your Enquiry view using Folder Tools

Folders allow you to customise/personalise the layout of the screen, and are available when the folder icon or folder menu appears.
Custom folders are specific and unique to the user who creates them





All these functions can also be accessed from the Oracle menu item called **"Folder"**

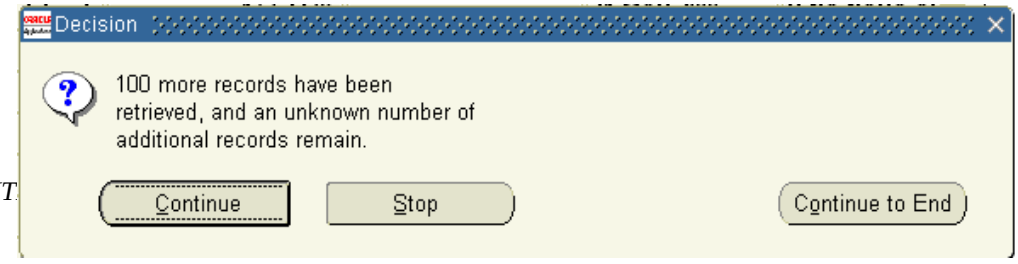
To Save a folder view:

1. Select New from the 'Folder' menu.
2. Give your folder a name in the Folder field. (E.g. Phil's Export Screen)
3. If you want this folder view every time you view this screen, tick the 'Open as Default' box
4. Click on the Folder icon on the Toolbar to open the Folder Tools toolbar shown above.
5. Customise your folder by moving, unhiding, hiding, and resizing columns using the Folder Tools.
6. Click on the "Save" icon when you have finished customising.

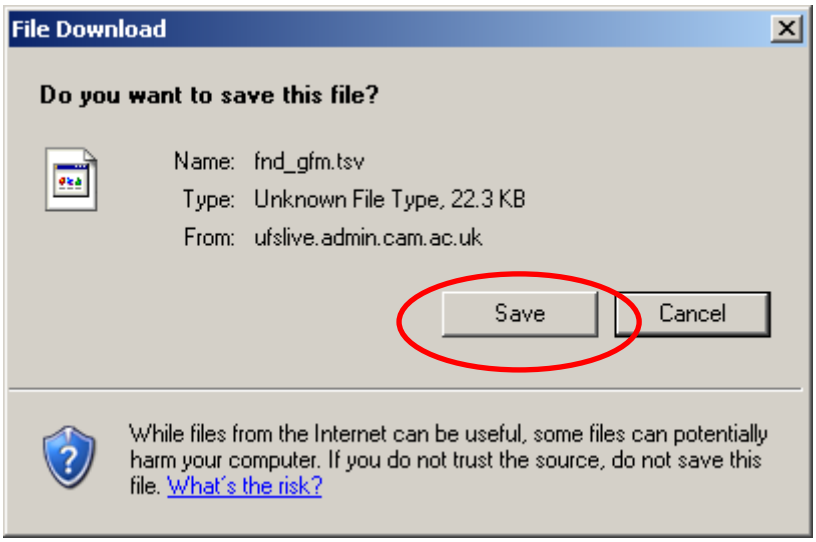
1.4 Exporting your Enquiry

From the Menu bar choose: **File → Export**

If you have more than 100 records, you will see this screen. Select **Continue to End**. All the records will be retrieved and a red progress bar will show the % completed.

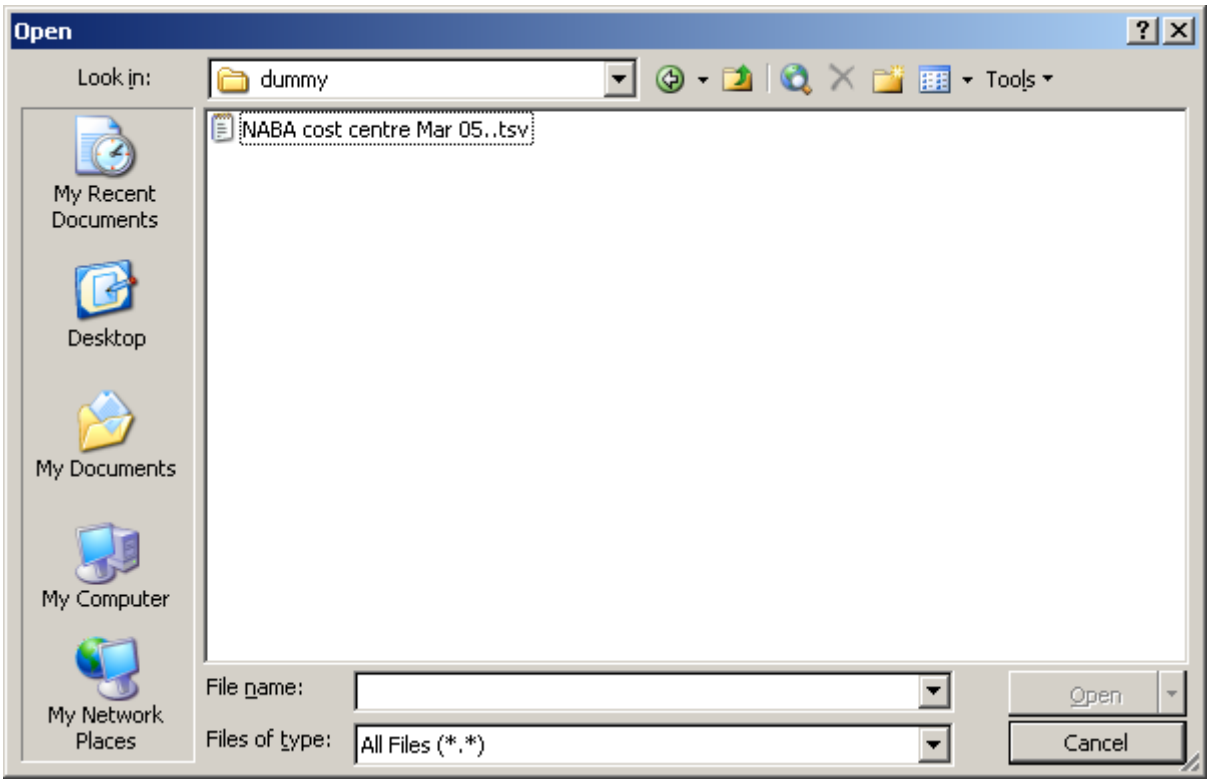


When the export has completed you will see the following window:



Save the file in an appropriate place, with a file name of your choice but retaining the .tsv file type.

Now open up Excel, find and open your file remembering to change the file type to All Files – so you can see the .tsv file types as well.

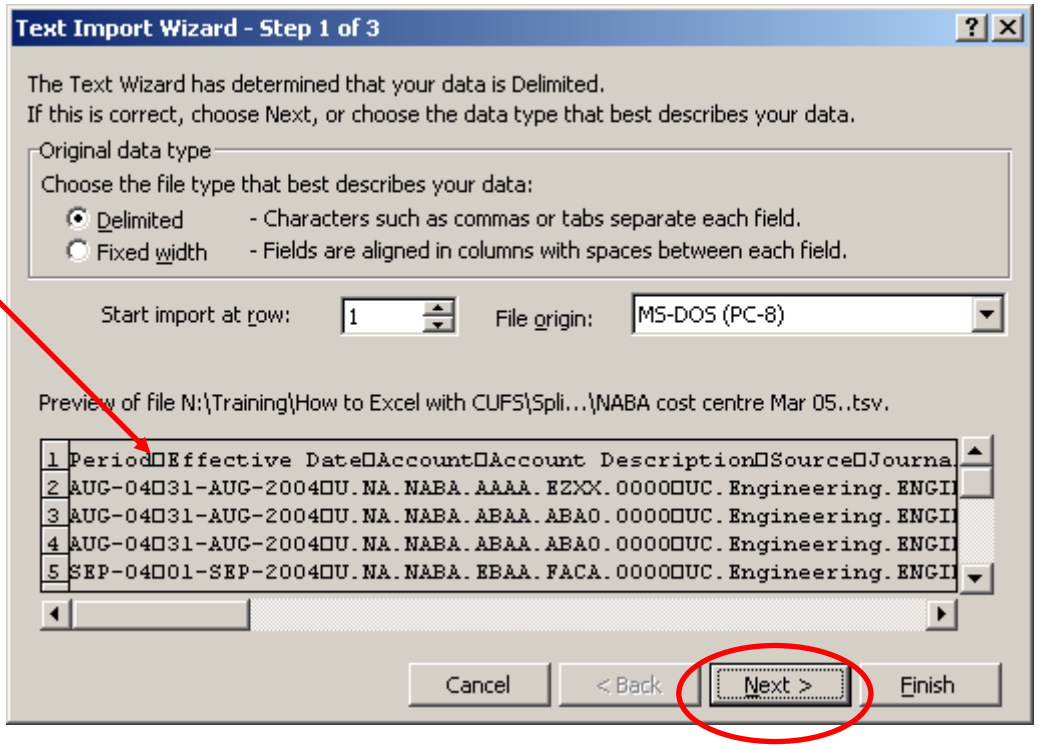


Now work through the 'Text Import Wizard' steps…

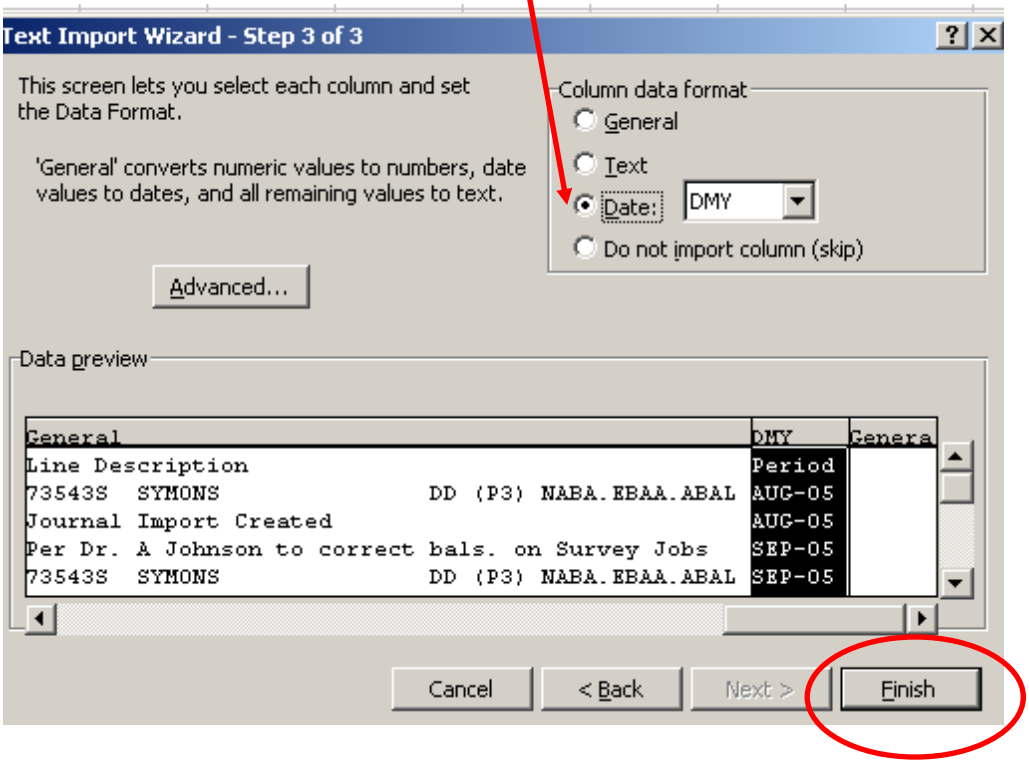
Each of these small squares represents a tab in Excel.

Therefore, our data is 'delimited'.

Just click on Next.



Format the Period Name as a date field and then click on Finish.

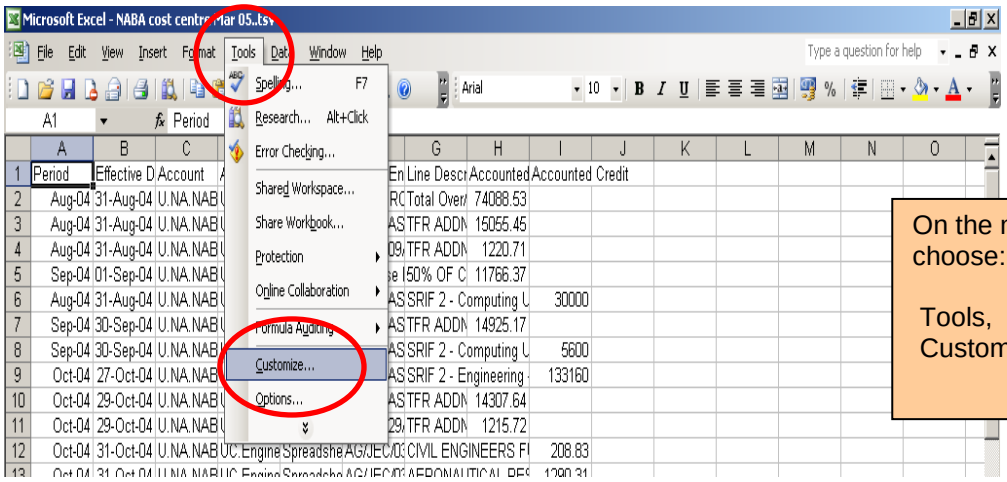


Your data will then be displayed in an Excel spreadsheet, however it still is a 'text.' file, so resave and change the file type to a Microsoft Excel workbook.

2. Excel Toolbars, Navigation and Formatting

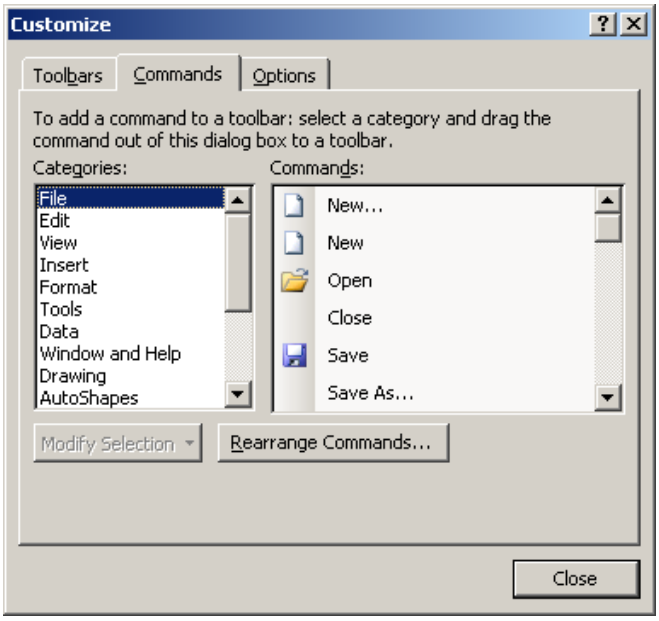
2.1 Customising Excel Toolbars

It is sometimes useful to customise your toolbar in Excel so that you have icons displayed for the functions that you are likely to use on a regular basis.



On the menu choose:

Tools,
Customise.



- Select Commands tab and then choose a category
- Click onto the command you would like to see on the toolbar and drag it onto the tool bar at the top of your screen. The icon will appear on the toolbar from now on.
- Click remove an icon, repeat these steps. When the commands window is open (as left) drag any unwanted icons from the toolbar and drop anywhere in the commands window.

2.2 Moving around large spreadsheets

1) Selecting/highlighting a block of data:

Position the cursor in the first cell of the block (top left)
With the ***SHIFT*** key held down, press and release the ***End*** key and then the ***right arrow*** key then the ***down arrow*** key.

2) Going to last cell containing data (the bottom right corner): ***Ctrl + End***

3) Returning to the top of your spreadsheet: ***Ctrl +Home***

Note: More quick keys are listed in the appendix at the back of this manual

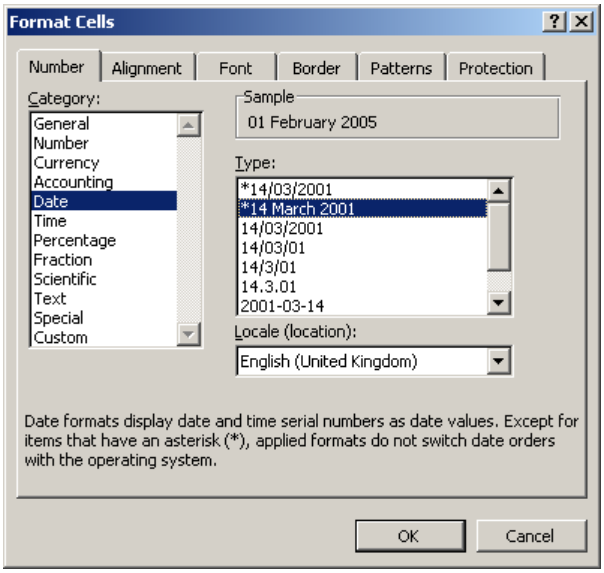
2.3 Working with Foreign Currencies & Reconciling

Before you start to manipulate the data in Excel you should ensure that it still reconciles back to CUFS – use the Autosum (∑) function to calculate a total and compare back.

Be really careful when dealing with foreign currencies in CUFS
:

- **Entered debits** is the foreign currency value whereas
- **Accounted debits** is the sterling value.

2.4 Formatting Date fields



Often it is useful to reformat date fields in Excel:

- For presentational purposes
- To allow individual days within a month to be grouped together

<u>To do this</u>

1. Highlight your date column
2. Select Format > Cells from the menu
3. Within the number tab pick your required format
4. Click OK

2.5 Formatting columns' width

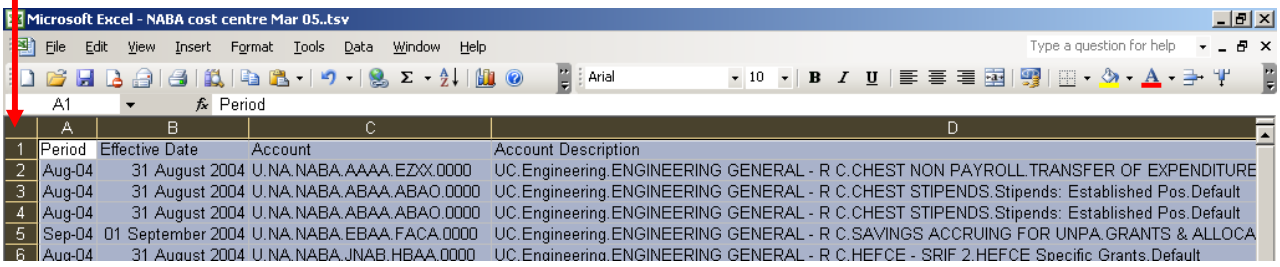
All Columns

Once exported into Excel you can quickly format all the columns on your spreadsheet by clicking on the top left hand box to highlight the whole spreadsheet and then either:

a) Format menu → Column → Autofit Selection;

or alternatively:

b) place your cursor on the vertical line between columns (e.g. C) and its right hand neighbour (e.g. D) your cursor should change into a cross symbol and then double click



	A	B	C	D
1	Period	Effective Date	Account	Account Description
2	Aug-04	31 August 2004	U.NA.NABA.AAAA.EZXX.0000	UC.Engineering.ENGINEERING GENERAL - R C.CHEST NON PAYROLL.TRANSFER OF EXPENDITURE
3	Aug-04	31 August 2004	U.NA.NABA.ABAA.ABAO.0000	UC.Engineering.ENGINEERING GENERAL - R C.CHEST STIPENDS.Stipends: Established Pos.Default
4	Aug-04	31 August 2004	U.NA.NABA.ABAA.ABAO.0000	UC.Engineering.ENGINEERING GENERAL - R C.CHEST STIPENDS.Stipends: Established Pos.Default
5	Sep-04	01 September 2004	U.NA.NABA.EBAA.FACA.0000	UC.Engineering.ENGINEERING GENERAL - R C.SAVINGS ACCRUING FOR UNPA.GRANTS & ALLOCA
6	Aug-04	31 August 2004	U.NA.NABA.JNAB.HBAA.0000	UC.Engineering.ENGINEERING GENERAL - R C.HEFCE - SRIF 2.HEFCE Specific Grants.Default

Just One Column

Click in any single cell in the sheet (so nothing is highlighted).
Then, to adjust any single column width, follow the instruction in b) above on the column you wish to change.

3. Functions

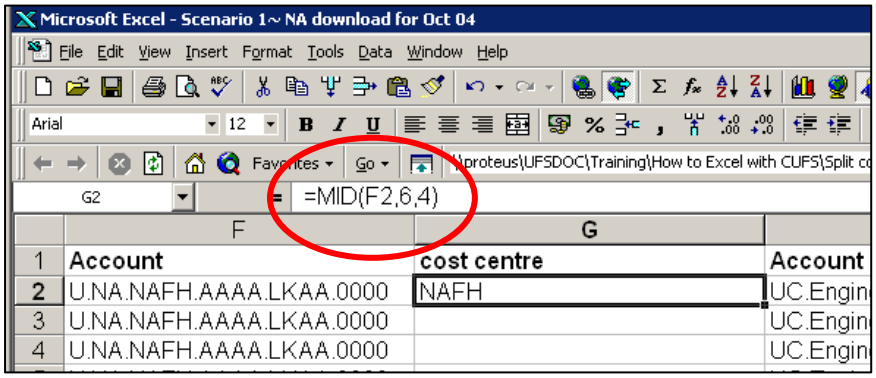
3.1 Extracting data from existing cells: the 'Mid' function

This is a particularly useful way of extracting the details of just one segment from an account code string, e.g. the cost centre

a) Insert a new column ready for your new data and give it a column title
b) Click into a cell in your new column and enter the formula:

=mid(F2,6,4)

F2 is the cell containing the source text
6 tells the formula to start at the sixth character in the text
4 indicates the number of characters to capture



Also: Using LEFT and RIGHT formulas

Similar to the Mid function, you can also capture text at the beginning and end of a cell by using LEFT and RIGHT formulas.

Looking at cell F2 in the screen shot above, to capture the nine characters U.NA.NAFH at the beginning of the cell use the LEFT formula:

=LEFT(F2,9)

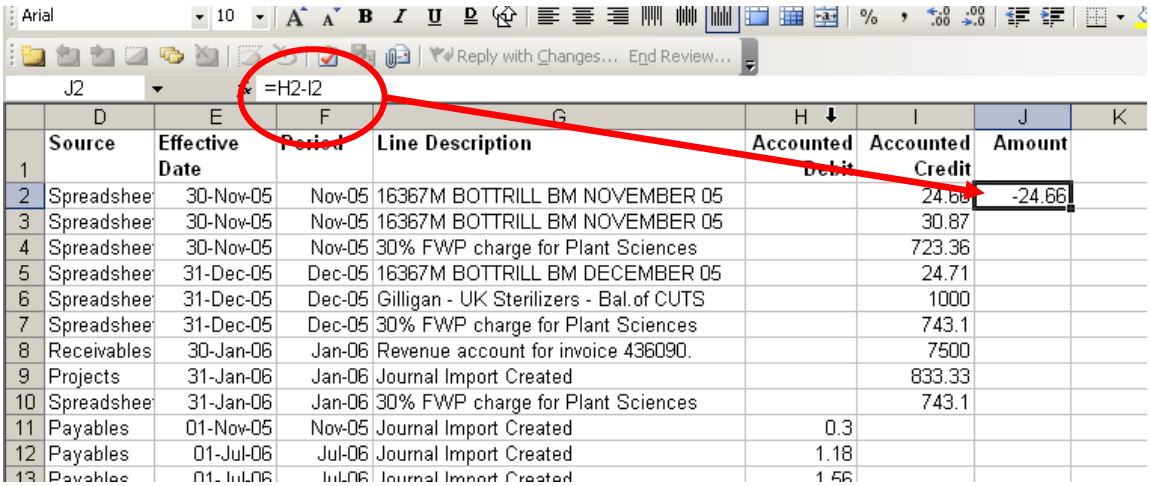
To capture the last nine characters LKAA.0000 use the formula:

=RIGHT(F2,9)

3.2 A quick way to put the debits and credits into a single column

The debits and credits are exported from the CUFS general ledger enquiry screen in two columns **and** they are both presented as positive numbers. In Excel, you want the credit values to be minus numbers and you want all the values in a single column. A simple and reliable way to do this is as follows:

a) Ensure there is a blank column to the right of the "Accounted Credits" column. To illustrate, let's say the new column is column J
b) Name the new column "Amount"
c) In cell J2, enter the formula **=h2-i2**



	D	E	F	G	H	I	J	K
1	Source	Effective Date	Period	Line Description	Accounted Debit	Accounted Credit	Amount	
2	Spreadshee	30-Nov-05	Nov-05	16367M BOTTRILL BM NOVEMBER 05		24.66	-24.66	
3	Spreadshee	30-Nov-05	Nov-05	16367M BOTTRILL BM NOVEMBER 05		30.87		
4	Spreadshee	30-Nov-05	Nov-05	30% FWP charge for Plant Sciences		723.36		
5	Spreadshee	31-Dec-05	Dec-05	16367M BOTTRILL BM DECEMBER 05		24.71		
6	Spreadshee	31-Dec-05	Dec-05	Gilligan - UK Sterilizers - Bal.of CUTS		1000		
7	Spreadshee	31-Dec-05	Dec-05	30% FWP charge for Plant Sciences		743.1		
8	Receivables	30-Jan-06	Jan-06	Revenue account for invoice 436090.		7500		
9	Projects	31-Jan-06	Jan-06	Journal Import Created		833.33		
10	Spreadshee	31-Jan-06	Jan-06	30% FWP charge for Plant Sciences		743.1		
11	Payables	01-Nov-05	Nov-05	Journal Import Created	0.3			
12	Payables	01-Jul-06	Jul-06	Journal Import Created	1.18			
13	Payables	01-Jul-06	Jul-06	Journal Import Created	1.56			

For each line of data, there will only be a value in either the debit column or credit column, never in both, so the result of the formula will be a plus figure for debits and a minus figure for credits.

d) Copy this formula down to the last row of data

The debit and credit columns are no longer needed but **before you delete them**, turn the formulas in the new Amount column (which are dependant on columns H and I) into values

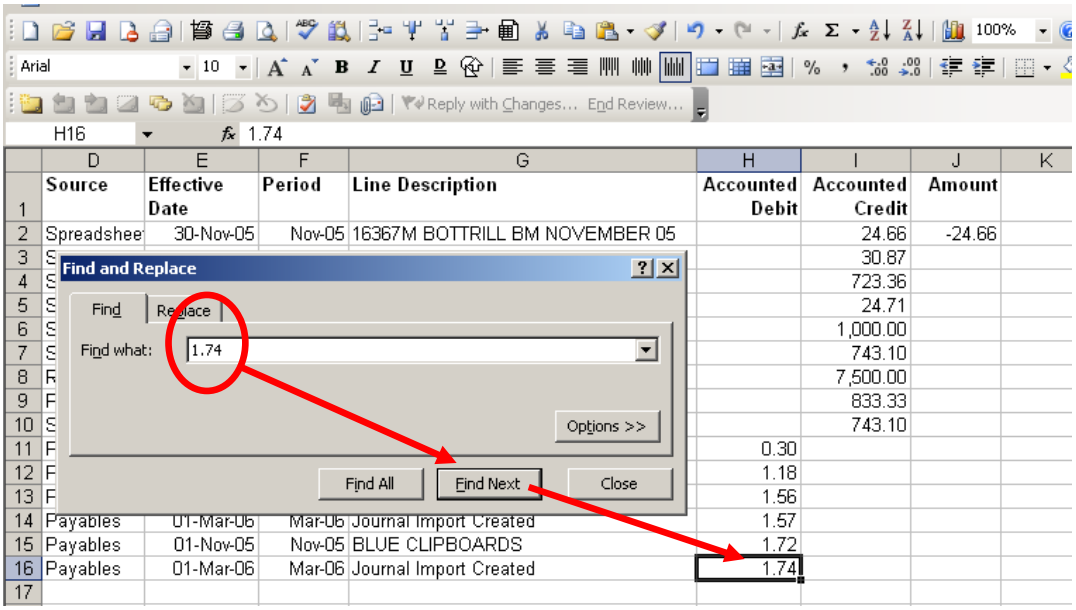
e) Highlight the whole of column J, select Copy, Paste Special, Values. This overwrites the formulas with plain numbers. ***See Section 3.6 for more***

f) Delete the debit and credit columns.

You now have one row of numbers, debits are positive, credits are negative, now Sum the column to make sure the total is still correct.

3.3 Find Function

Use Ctrl F (Find) or the binoculars icon on the toolbar to find a value or text anywhere in the spreadsheet. In this example we are searching for the value 1.74.
Type the value into the find what box then click on the Find Next button. If the value exists, it will go to the cell, you can then press “Find Next” again to see if there are any other cells containing 1.74, and so on.



	D	E	F	G	H	I	J	K
1	Source	Effective Date	Period	Line Description	Accounted Debit	Accounted Credit	Amount	
2	Spreadshee	30-Nov-05	Nov-05	16367M BOTTRILL BM NOVEMBER 05		24.66	-24.66	
3	S					30.87		
4	S					723.36		
5	S					24.71		
6	S					1,000.00		
7	S					743.10		
8	R					7,500.00		
9	F					833.33		
10	S					743.10		
11	F				0.30			
12	F				1.18			
13	F				1.56			
14	Payables	01-Mar-06	Mar-06	Journal Import Created	1.57			
15	Payables	01-Nov-05	Nov-05	BLUE CLIPBOARDS	1.72			
16	Payables	01-Mar-06	Mar-06	Journal Import Created	1.74			
17								

Click on close to clear the Find box.

3.4 Find and Replace Function

In addition to finding a value or text, you can then replace it with something else. You can also replace blank cells with a value.

In our data exercise we want to replace blank cells in the debit and credit column with zeros.

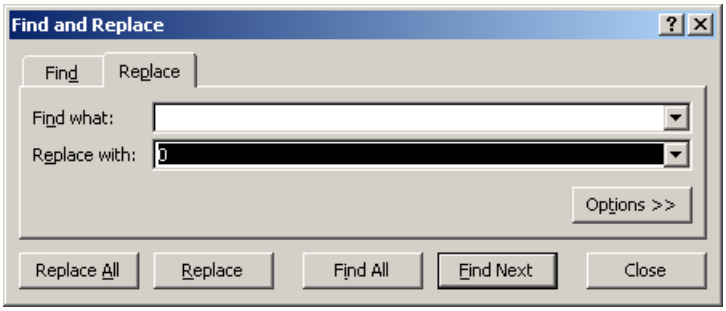
1) Highlight worksheet cells where you want to use Find and Replace

2) Use the quick keys Ctrl+H – bringing up the Find and Replace window

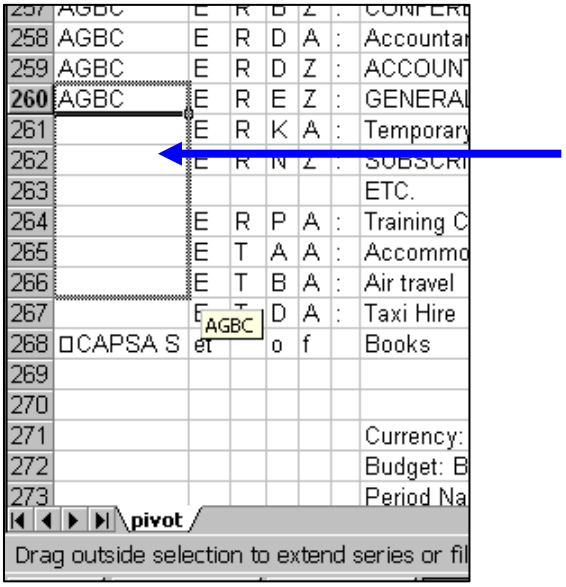
3) Find what: **leave it blank** (i.e. find blank cells)

4) Replace with: **0**

5) Click on the Replace all button



3.5 To copy cell contents/or cell formula quickly



a) Highlight the cell you want to copy

b) put your cursor on the bottom right hand corner of the cell's box so that you see the following symbol:

c) depress the left hand button of your mouse and keeping it pressed, drag it down over the cells where you want the information copied into.

3.6 Copy……Paste Special……Values

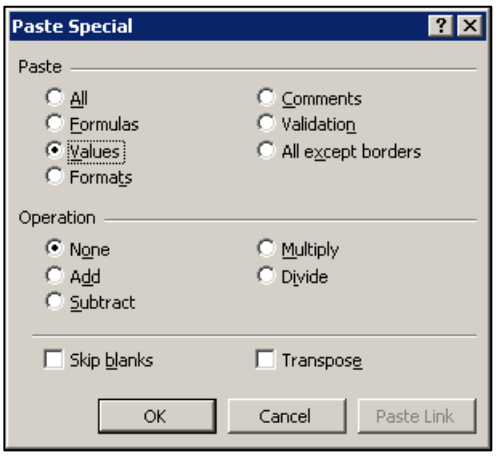
Instead of just Copy…Paste, try Paste Special. This function allows you to:

a) copy a formula from one cell to another

b) copy just the value from a cell, i.e. removing the formula behind the value

c) copy a comment from one cell to another

d) highlight that you want to paste just the 'values' and click OK



4. Data Functions

4.1 Sorting Data

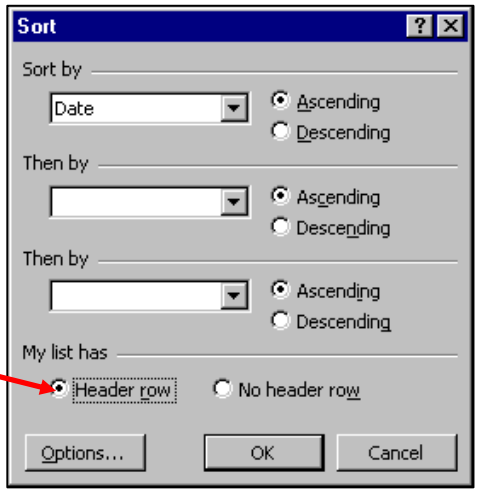
There are a variety of reasons why you may want to sort your spreadsheet in a particular order e.g.

- to put in date order;
- rearrange alphabetically,
- to rearrange in numeric value
- to collate together lines of information you do not need so you can delete them quickly and easily

This instruction assumes your data has column headings (called the *header row*).

To do:

1. Highlight the whole spreadsheet or the block of data you wish to sort
2. Select Data> Sort from the menu
3. remember to click the circle, saying that your data includes a Header Row
4. Tell Excel which columns to sort by (you can select up to three)
5. Click on OK

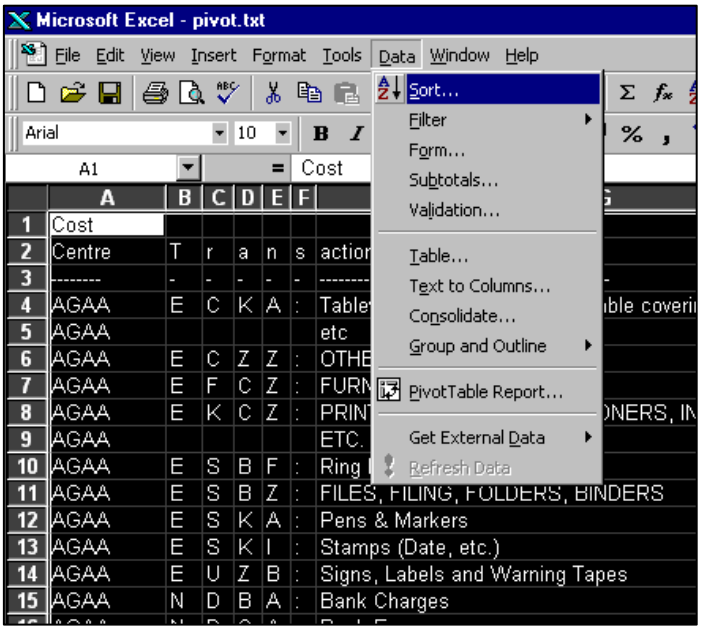


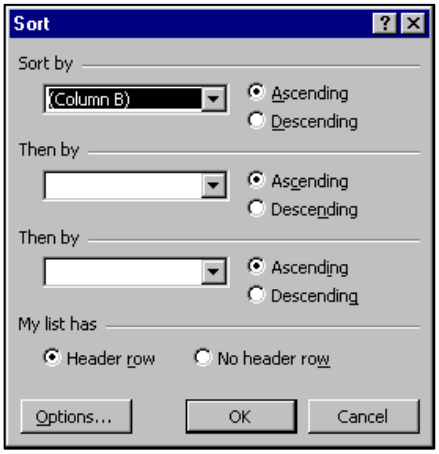
4.2 Removing unwanted lines

To get rid of unwanted lines:

a) highlight the whole spreadsheet

a) Select Data→Sort





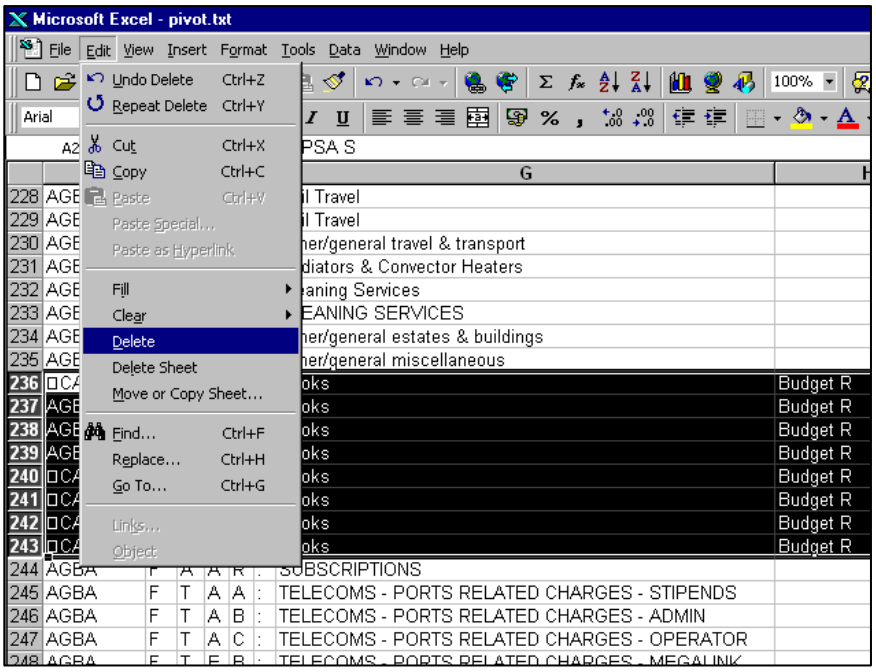
Ask the system to sort the data as per one of the columns where you know there is data that you want (e.g. in the example shown by column B)

Delete the lines from the spread sheet that you don't need…

- Highlight lines
- Select Edit → Delete

Repeat as necessary

(NB, the F4 button repeats the function – in this case the line deleting)

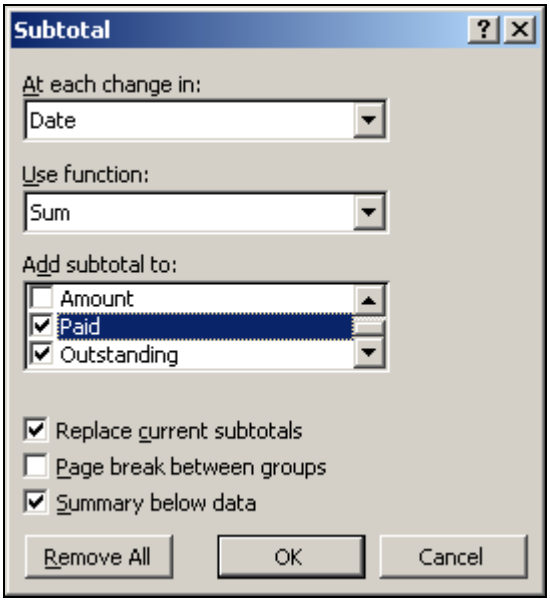


4.3 Subtotalling

Sub-totalling is a very easy to use tool but first you must make sure:

a) the data is sorted in the way you wish to subtotal – if you want to subtotal by cost centre, the data should be sorted by cost centre

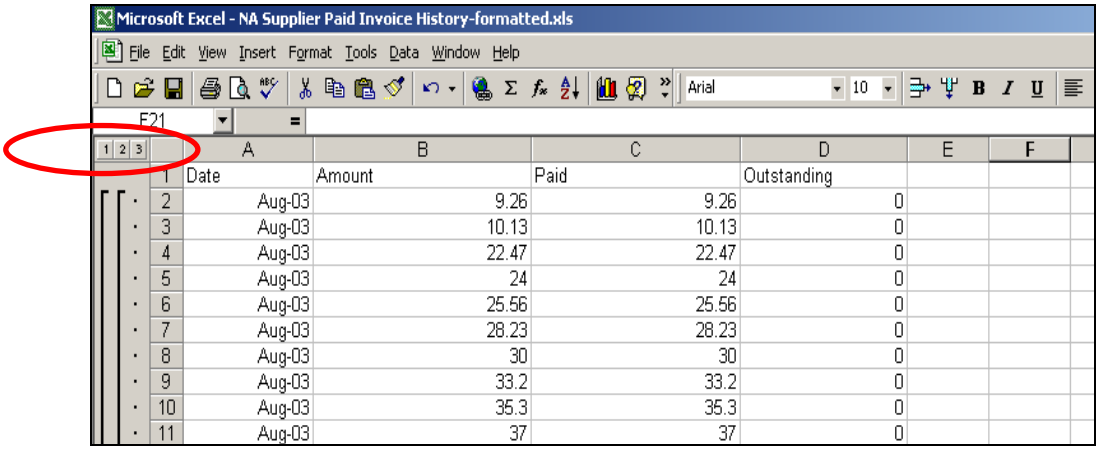
b) columns with dates in them are actually ***formatted*** as dates, otherwise they will sort alphabetically rather than chronologically



To do:

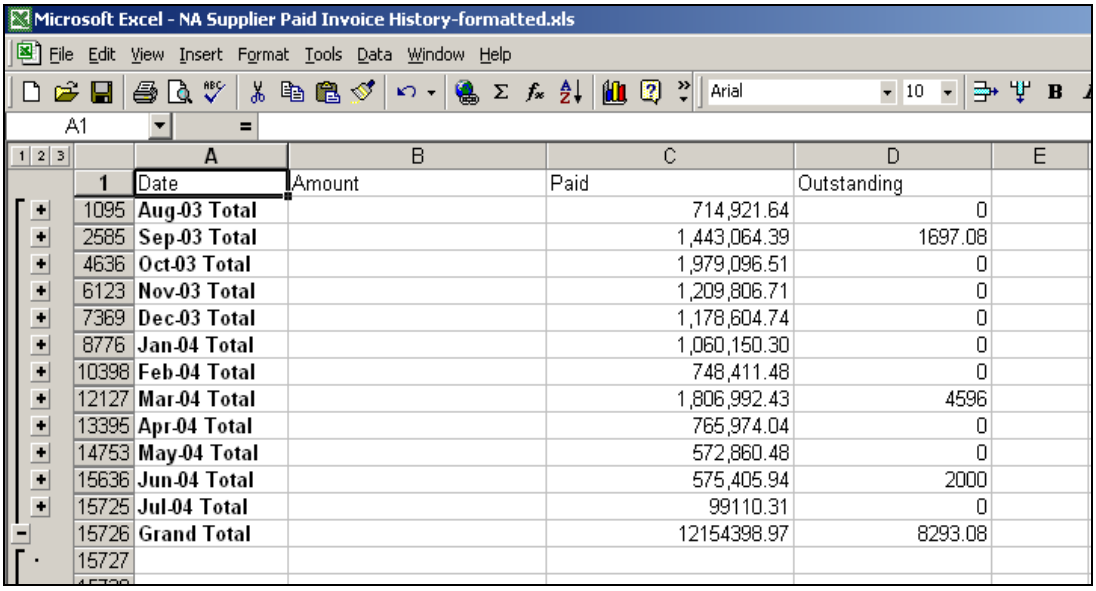
1. Highlight the whole spreadsheet or block of data
2. Select Data > Subtotals from the menu
3. Set the required sub-totalling criteria
4. Click OK

Excel will create subtotal rows within the data. They are special formulas that are placed at the end of each month. The left edge of your worksheet will look different, giving 3 options at the top of the sheet for choosing the level of detail you wish to see.



	A	B	C	D	E	F
1	Date	Amount	Paid	Outstanding		
2	Aug-03	9.26	9.26	0		
3	Aug-03	10.13	10.13	0		
4	Aug-03	22.47	22.47	0		
5	Aug-03	24	24	0		
6	Aug-03	25.56	25.56	0		
7	Aug-03	28.23	28.23	0		
8	Aug-03	30	30	0		
9	Aug-03	33.2	33.2	0		
10	Aug-03	35.3	35.3	0		
11	Aug-03	37	37	0		

To begin with, all rows are shown **but if you click on button 2** , all the detail is hidden and the just the subtotals show……



	A	B	C	D	E
1	Date	Amount	Paid	Outstanding	
1095	**Aug-03 Total**		714,921.64	0	
2585	**Sep-03 Total**		1,443,064.39	1697.08	
4636	**Oct-03 Total**		1,979,096.51	0	
6123	**Nov-03 Total**		1,209,806.71	0	
7369	**Dec-03 Total**		1,178,604.74	0	
8776	**Jan-04 Total**		1,060,150.30	0	
10398	**Feb-04 Total**		748,411.48	0	
12127	**Mar-04 Total**		1,806,992.43	4596	
13395	**Apr-04 Total**		765,974.04	0	
14753	**May-04 Total**		572,860.48	0	
15636	**Jun-04 Total**		575,405.94	2000	
15725	**Jul-04 Total**		99110.31	0	
15726	**Grand Total**		12154398.97	8293.08	
15727					

c) To reveal the detail behind the subtotals, click on one or more of the plus signs

To remove subtotals:

Click on Data, Subtotals and then click the ***Remove all Subtotals*** button.

4.4 Filtering

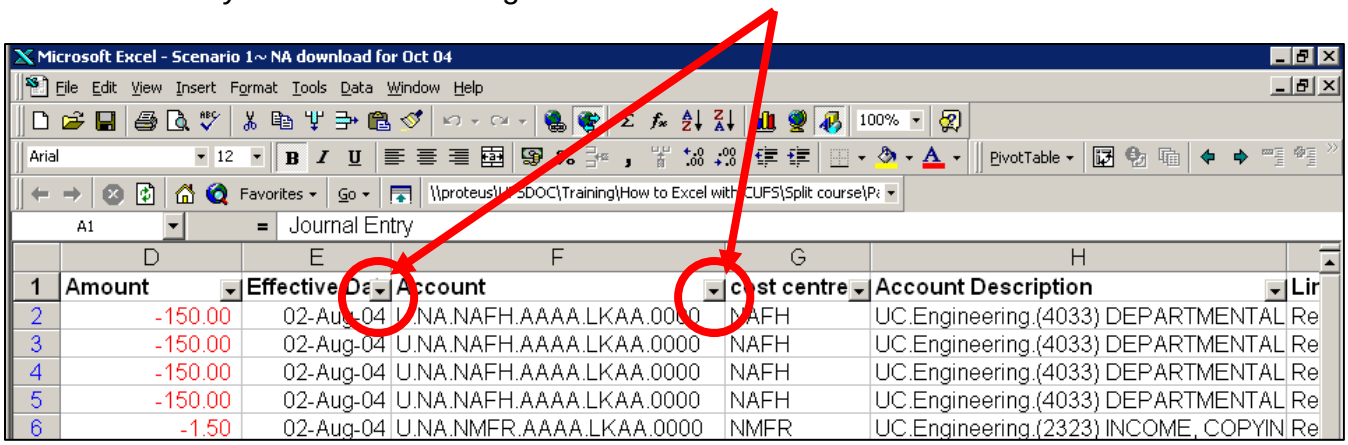
Filters are very handy when there are many rows and columns of data in an Excel spreadsheet. A filter allows you narrow down the view of the data based on criteria you select.

Before you begin filtering:

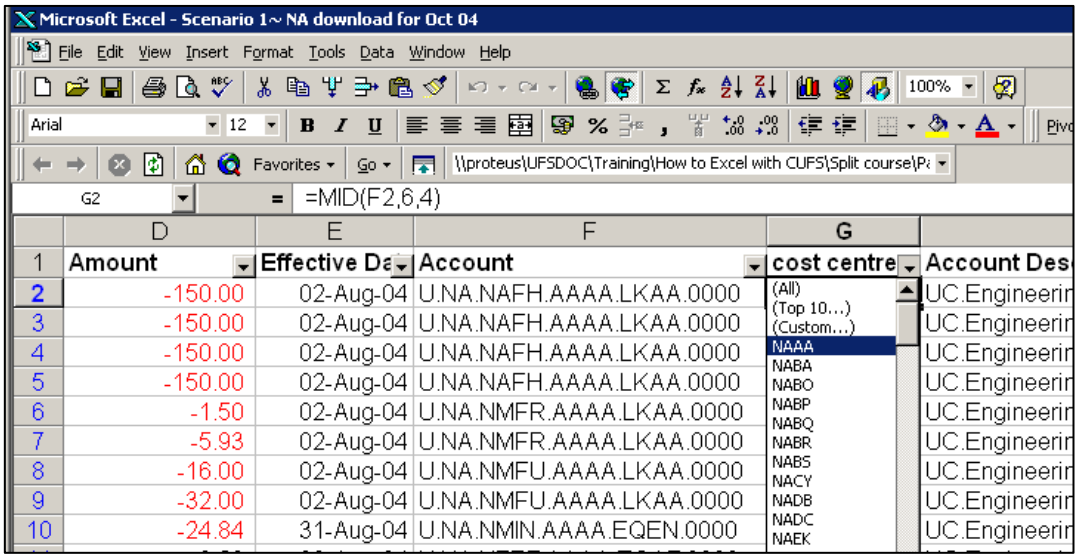
a) Remove any subtotals
b) Highlight the whole spreadsheet (or the data block)

Then:

c) From the menus select: Data > Filters >AutoFilter
This will automatically put little drop down arrows (the 'filters') next to each of your column headings



d) to filter your data click an arrow and pick from the relevant drop down list, e.g. data for just cost centre NAAA



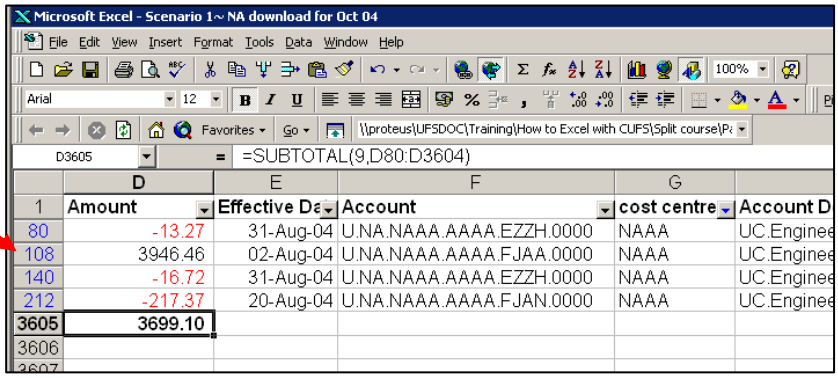
e) You could then apply filters to other columns if you wish
e.g. filter by a particular cost centre and then by period

f) When filters are applied, the Autosum function recognises the filters and acts differently:

In the example below, instead of =sum(D1:D3604), only the filtered and displayed data is included in the sum – a subtotal for the filtered data is calculated

Bonus feature: When you apply a different filter, the sum total changes automatically

Line numbers from your original spreadsheet that contain the required filtered information



Useful Tips:

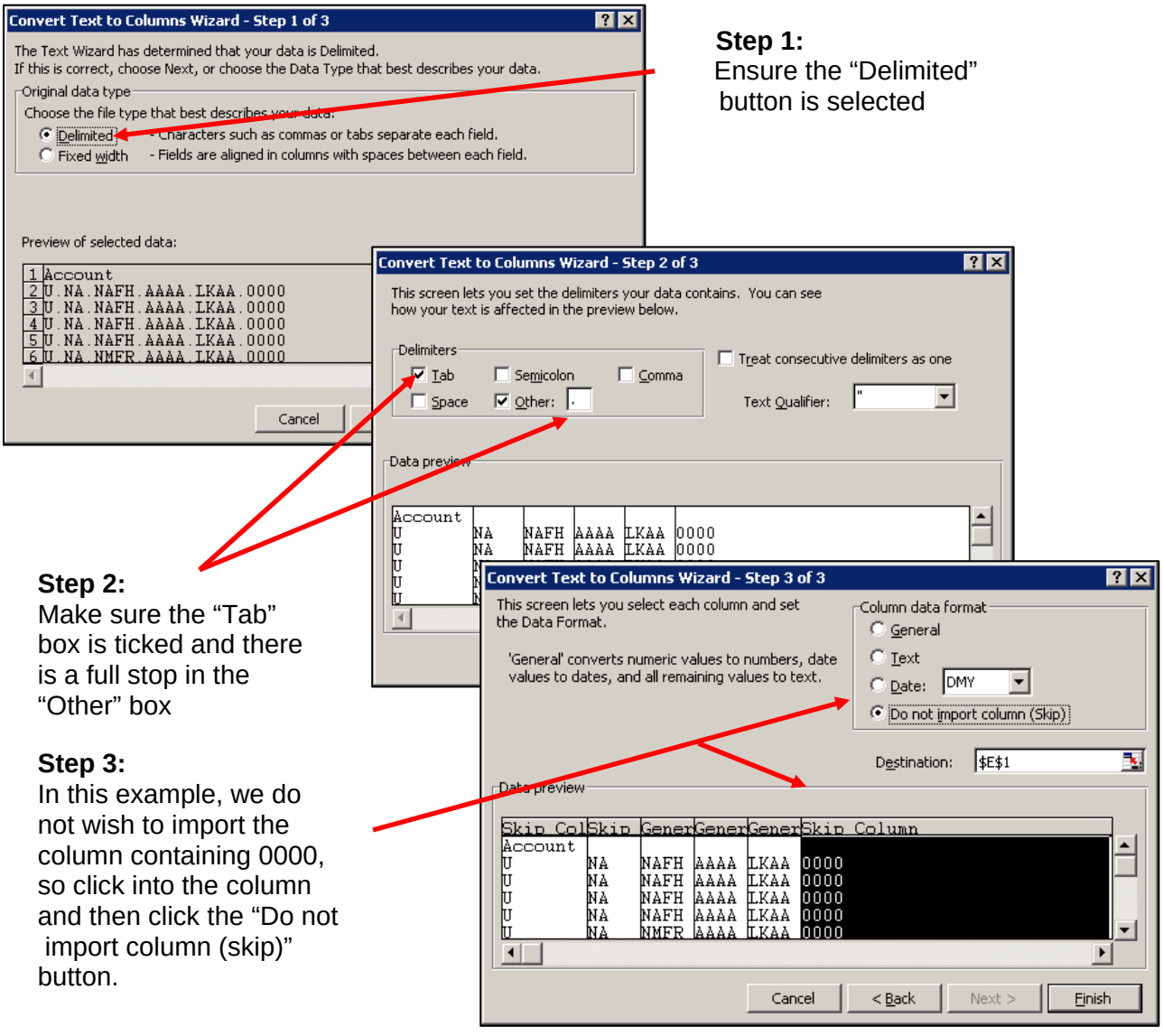
- When a filter is on and the data is highlighted and copied to another sheet, only the filtered data is copied.
- When the filter is on and the amount column is highlighted the sum of the transactions will only include the filtered data

To get rid of the filters, simply position the cursor anywhere in the data and choose: Data, Filter, Auto-filter – to untick the feature.

4.5 Text To Columns function

A particularly useful function for splitting up an account code string into its constituent segments.

a) Insert additional blank columns to match the number of splits you want in the source data
b) Make sure the column you want to split up is highlighted
c) Select from the menu: Data> Text to Column



Step 1:
Ensure the "Delimited" button is selected

Step 2:
Make sure the "Tab" box is ticked and there is a full stop in the "Other" box

Step 3:
In this example, we do not wish to import the column containing 0000, so click into the column and then click the "Do not import column (skip)" button.

Click "Finish". In your spreadsheet, the single column will be replaced with the new columns of split data.

APPENDIX:

Excel navigation keys

Key	Description
CTRL+*	Selects the current region around the active cell (the data area enclosed by blank rows and blank columns). In a PivotTable, it selects the entire PivotTable report.
CTRL+A	Selects the entire worksheet. If the worksheet contains data, CTRL+A selects the current region. Pressing CTRL+A a second time selects the entire worksheet. When the insertion point is to the right of a function name in a formula, displays the **Function Arguments** dialog box. CTRL+SHIFT+A inserts the argument names and parentheses when the insertion point is to the right of a function name in a formula.
CTRL+F	Displays the **Find** dialog box. SHIFT+F5 also displays this dialog box, while SHIFT+F4 repeats the last **Find** action.
CTRL+G	Displays the **Go To** dialog box. F5 also displays this dialog box.
CTRL+H	Displays the **Find and Replace** dialog box.
F5	Displays the **Go To** dialog box.

Other useful shortcut keys

Key	Description
ARROW KEYS	Move one cell up, down, left, or right in a worksheet. CTRL+ARROW KEY moves to the edge of the current data region (data region: A range of cells that contains data and that is bounded by empty cells or datasheet borders.) in a worksheet. SHIFT+ARROW KEY extends the selection of cells by one cell. CTRL+SHIFT+ARROW KEY extends the selection of cells to the last nonblank cell in the same column or row as the active cell. LEFT ARROW or RIGHT ARROW selects the menu to the left or right when a menu is visible. When a submenu is open, these arrow keys switch between the main menu and the submenu. DOWN ARROW or UP ARROW selects the next or previous command when a

	menu or submenu is open. In a dialog box, arrow keys move between options in an open drop-down list, or between options in a group of options. ALT+DOWN ARROW opens a selected drop-down list.
END	Moves to the cell in the lower-right corner of the window when SCROLL LOCK is turned on. Also selects the last command on the menu when a menu or submenu is visible. CTRL+END moves to the last cell on a worksheet, in the lowest used row of the rightmost used column. CTRL+SHIFT+END extends the selection of cells to the last used cell on the worksheet (lower-right corner).
HOME	Moves to the beginning of a row in a worksheet. Moves to the cell in the upper-left corner of the window when SCROLL LOCK is turned on. Selects the first command on the menu when a menu or submenu is visible. CTRL+HOME moves to the beginning of a worksheet. CTRL+SHIFT+HOME extends the selection of cells to the beginning of the worksheet.
PAGE DOWN	Moves one screen down in a worksheet. ALT+PAGE DOWN moves one screen to the right in a worksheet. CTRL+PAGE DOWN moves to the next sheet in a workbook. CTRL+SHIFT+PAGE DOWN selects the current and next sheet in a workbook.
PAGE UP	Moves one screen up in a worksheet. ALT+PAGE UP moves one screen to the left in a worksheet. CTRL+PAGE UP moves to the previous sheet in a workbook. CTRL+SHIFT+PAGE UP selects the current and previous sheet in a workbook.
SPACEBAR	In a dialog box, performs the action for the selected button, or selects or clears a check box. CTRL+SPACEBAR selects an entire column in a worksheet. SHIFT+SPACEBAR selects an entire row in a worksheet. CTRL+SHIFT+SPACEBAR selects the entire worksheet.

- If the worksheet contains data, CTRL+SHIFT+SPACEBAR selects the current region. Pressing CTRL+SHIFT+SPACEBAR a second time selects the entire worksheet.
- When an object is selected, CTRL+SHIFT+SPACEBAR selects all objects on a worksheet.

ALT+SPACEBAR displays the **Control** menu for the Excel window.