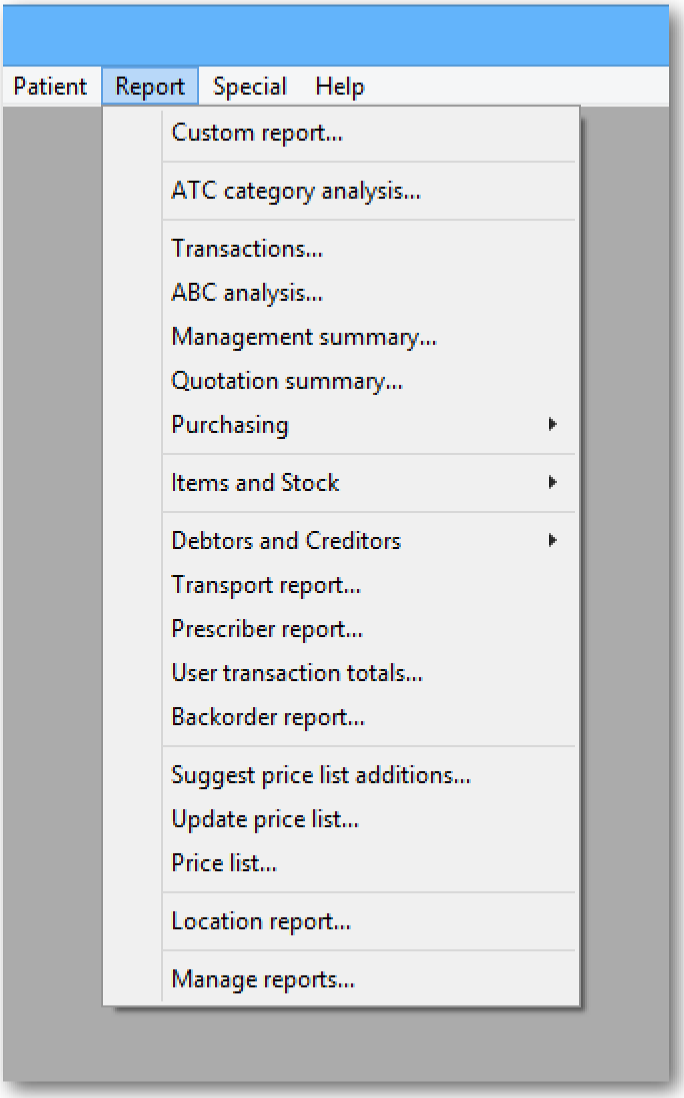
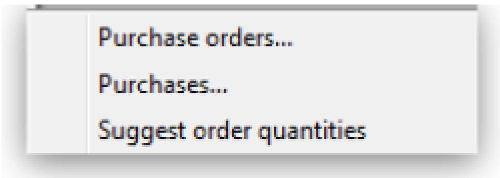
13.01. Report basics

Choose *Report* from the menus and this menu appears:

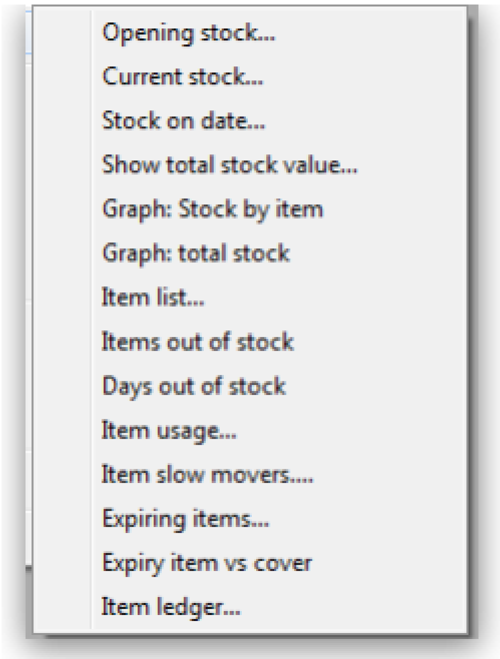


For some reports, the default setting includes *all items*, and as most stores will have several hundred items - maybe over 1,000 - reports on all items will, if printed, use a great deal of paper. If you must have a printout of your report, please exercise caution when selecting the criteria, and so avoid wasting paper.

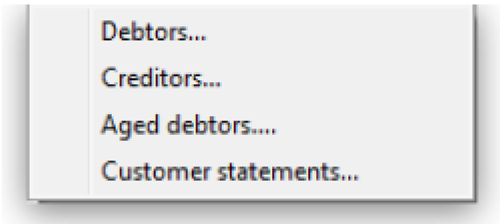
Reports on purchasing are displayed when *Purchasing* is selected:



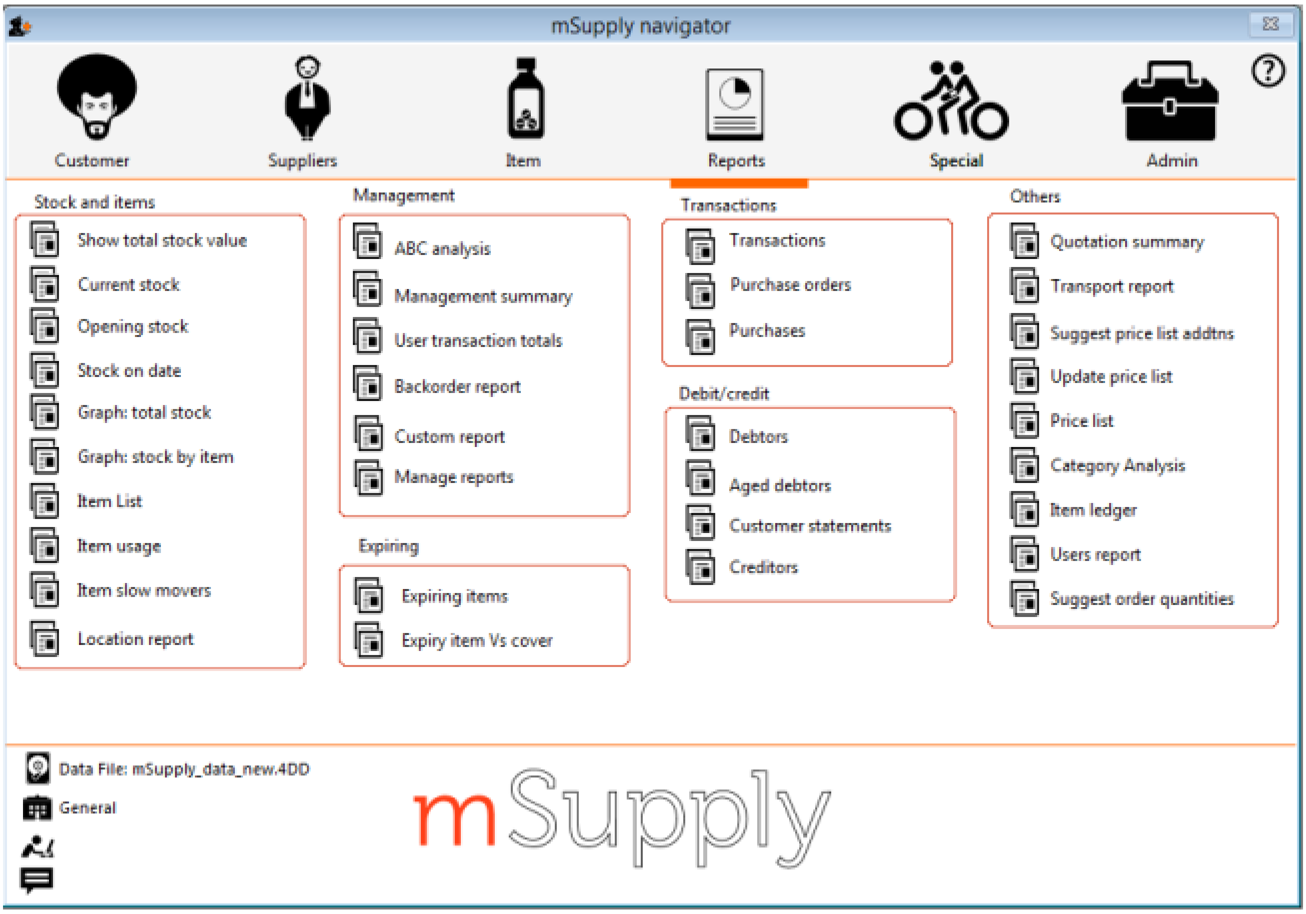
Reports on items and stock are displayed when *Items and Stock* is selected:



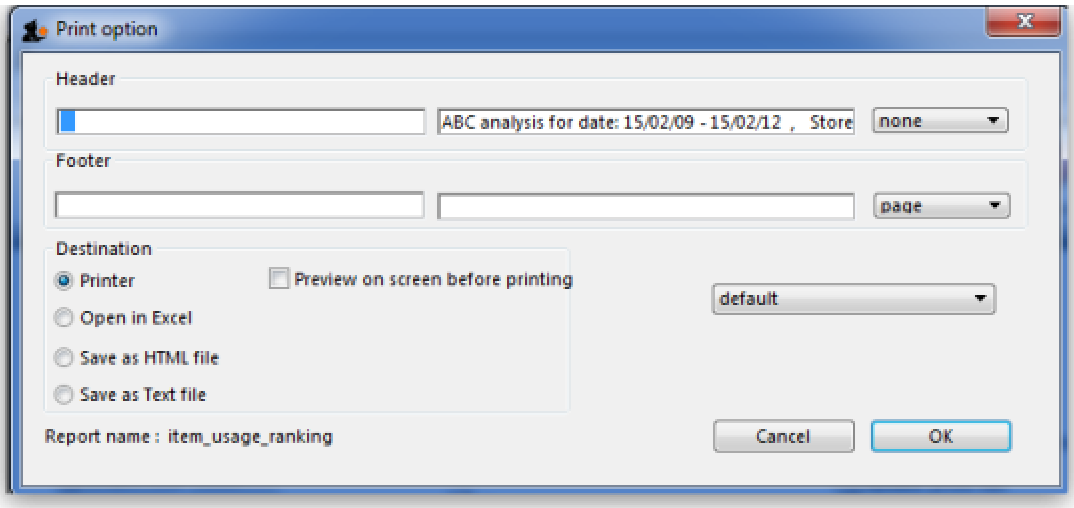
Reports on debtors and creditors are displayed when *Debtors and Creditors* is selected.



Many reports are available from the Reports page of the Navigator, as shown below:



Many of the reports present you with a window like this before printing the report:



This window allows you to set various options:

Report destinations

Printer: Select this option to display.the print window. The preview of the report can be displayed by turning on the print preview.

Open in Excel: *If the Open in Excel* box is checked, mSupply will immediately open the report as a spreadsheet in the spreadsheet application (MS Excel, OpenOffice/LibreOffice Calc etc.) you have installed on your computer.

- When this box is checked, you will first be asked to save the report. Once you have given it a name, the report will be saved, and then automatically opened in spreadsheet form.
- mSupply automatically detects any spreadsheet application you have installed on your computer (i.e. any application that is associated with .xls or .xlsx files). You do not have to set the location of this application.

Save to HTML file: If this option is selected, your report will be saved with extension ".html". Hence, it can be opened by any web-browser or spreadsheet application on any platform or operating system.

Save as Text file: Your report will be saved to a file as a tab-delimited text file. (That is, a tab character between each column and a return character at the end of each row). After saving, you can open the file in a spreadsheet or word processing program.

Header and footer

You can choose what information will be displayed at the top and bottom of each page. The default report heading appears in the right hand *Heading* field and is automatically set according to the report you are printing: you can edit this as required and what is entered in this field is what will be printed as the report title. By default, the date will print on the left and the page number on the top right of each page.

If you have filled in a default header and footer in the Preferences, these will be displayed at the top left (for the header) and the bottom centre (for the footer)

Preview on screen before printing

This option turns on print preview. Note that you can also turn on print preview from the print window that is displayed after you click the OK button.

Output to Excel

Most reports can be output to an Excel file. This is particularly helpful if you are wanting to analyse a large amount of data.

As at July 2021, there are three methods of producing Excel reports from mSupply:

- **Quick reports** - Easiest to create, fastest to run, but least flexible in terms of formatting. mSupply users can create these - refer Custom reports
- **SRP reports** - More powerful than Quick reports
- **XL Plugin reports** - Most powerful in terms of formatting, but slowest in terms of operation.

Sometimes new, more powerful versions of existing reports have been created using the XL Plugin specifically for the purpose of analysis using pivot tables and filters. We have not wanted to delete the older reports, so we have kept them, and named the new report with **[Excel]** in the title.

Reports produced for Excel will sometimes not have the data formatted correctly, particularly, dates - refer to this.

Supervisor mode (reporting over mutiple stores)

If you wish to report over mutiple stores at once, you can be given permission to use Supervisor mode. When you are in this mode, report filter windows will have an additional store list added ot the window so that you can choose which stores' records are to be included in the report.

See the 25.01. Miscellaneous topics: Supervisor mode - all stores page for details.

*Previous: **13. Reports** | | Next: **13.02. Stock and items reports***

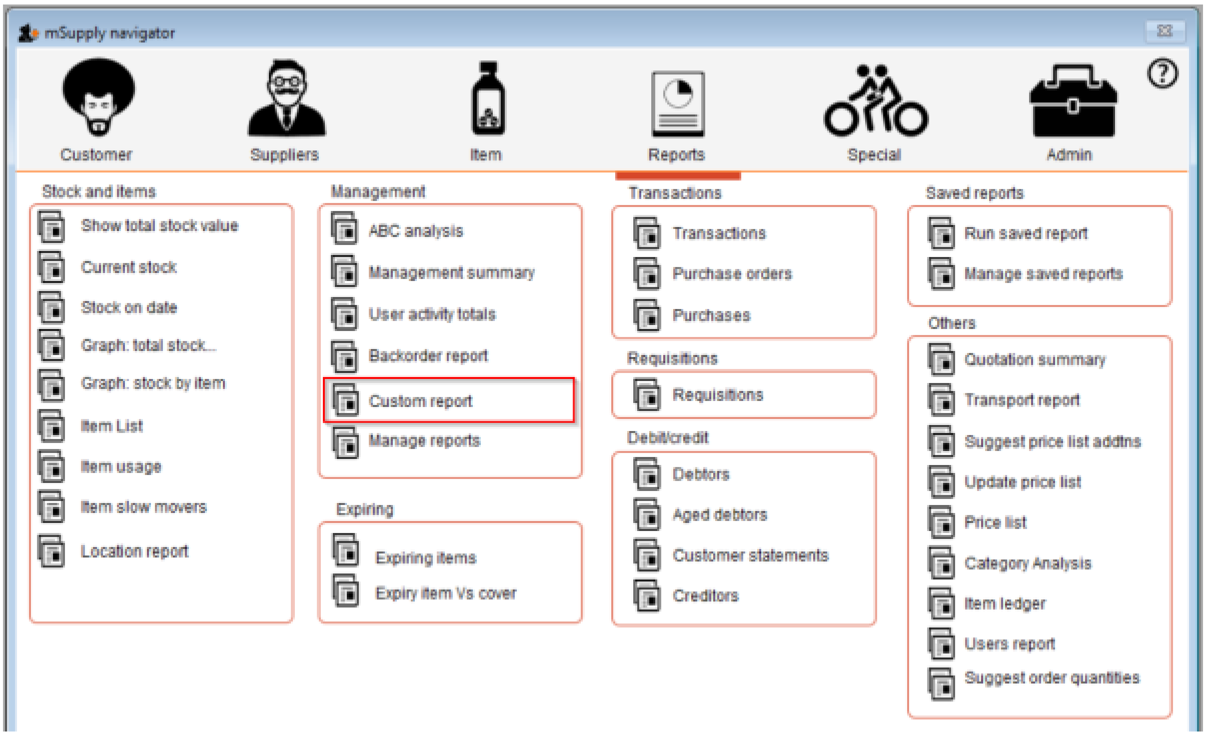
13.15. SuperReport editor

- mSupply includes the SuperReport editor plugin.
- This gives almost unlimited customisation possibilities for forms and reports.

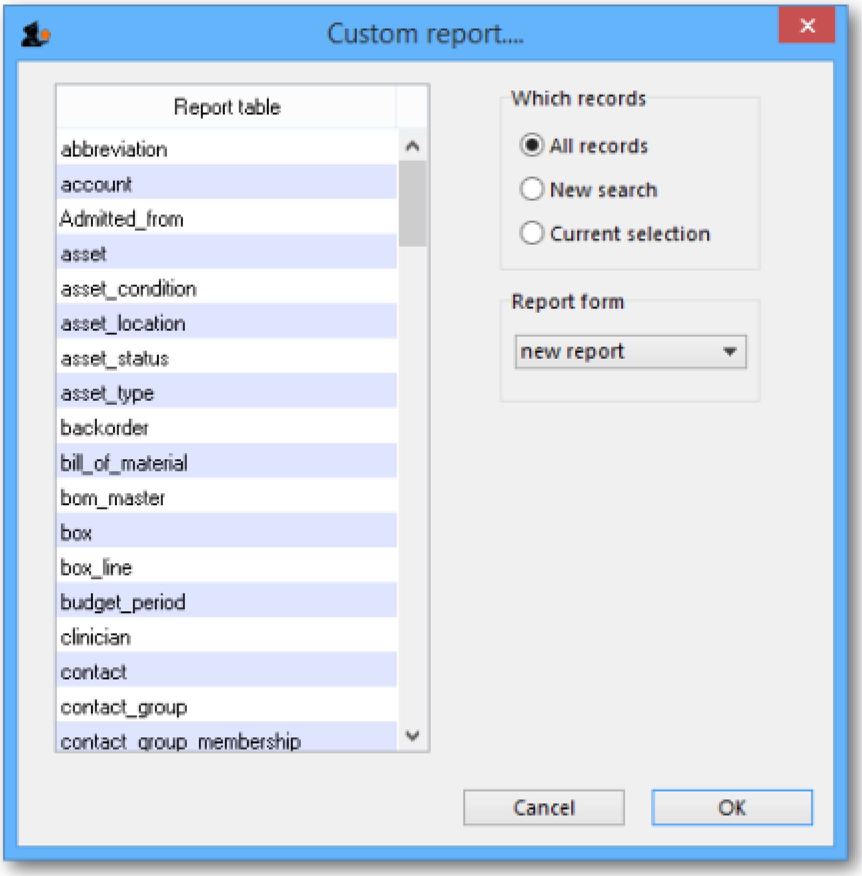
Due to security issues, report customisation using SuperReport can only be done by Sustainable Solutions. Contact us for more details.

*Previous: **13.14. Custom reports** | | Next: **15. Barcode Scanning***

13.14. Custom reports



Choosing this item brings up a window for creating a custom report:



The custom report window is displayed allowing you to create a report according to your own requirements using the Quick Report editor; once created you may save the form of the report in the *custom reports* folder for future use.

The window requires you to make three choices:

Report table

A list of tables on the left to choose which table (which type of records) you want to report on, e.g. Names, Items, etc.

As of version 1.6 there are two options for transaction lines. The “Transaction lines (Transaction query)” option allows you to search much faster on a large number of transaction lines. For example, if you are wanting to get the quantity of each item given to customers in a specific month, you would use this option.

Which records

A series of radio buttons to choose which records to examine

- All records
- New search (query), if you want to report on records meeting specific criteria. If chosen, you will be presented with the Query (search) editor, where you can build search statements to your heart's content! A short description of using the query editor is given below, and two example searches are later described. For a more comprehensive description, a range of books is available either in electronic or hard copy versions. Please email info@msupply.org.nz for more information.
- The “Current selection” is the group of records that were last displayed. For example, you can use the Item | View or edit item command quickly to find all items starting with “a”. When you click the OK button, the items in the list are the “current selection”. If you are not sure which records represent the current selection, you should click the “new search” radio button.

Report form

A drop down list displaying available options:

- New report
    - After clicking the OK button you will be presented with the report editor where you can design a report. The report editor is somewhat complex, but time spent in learning how to use it is time well spent. It is a powerful and invaluable feature. A brief introduction together with designing two simple reports are given in *Designing a Report* below, and more details are available in training courses on using mSupply, and in publications available from Sustainable Solutions.
    - If you want to save a report or search (query), you can save them on your hard disk, and retrieve them next time you run the report.
    - If you save the report you have created in the Custom reports folder it will show up in the report form drop-down menu on future occasions when you choose custom report.
    - The default location for saving your custom reports is My Documents\mSupply\custom reports; it is important to note here that any custom reports you have created *should not* be saved in the My Documents\mSupply\Reports folder, otherwise problems may arise.
- New label layout
    - Presents you with the label editor, where you can design and save label layouts. These are useful for use with names for addressing envelopes, and with Items for making tags for labeling shelves in your warehouse.

    - If you choose this option the “Order by” window will appear after a query. This allows you to sort the records into a particular order before printing labels. (In a nutshell: Drag fields from the list on the left to the list on the right to use them for sorting)
- Other items in the menu
    - If you have saved any reports in the custom reports folder they will be listed here.

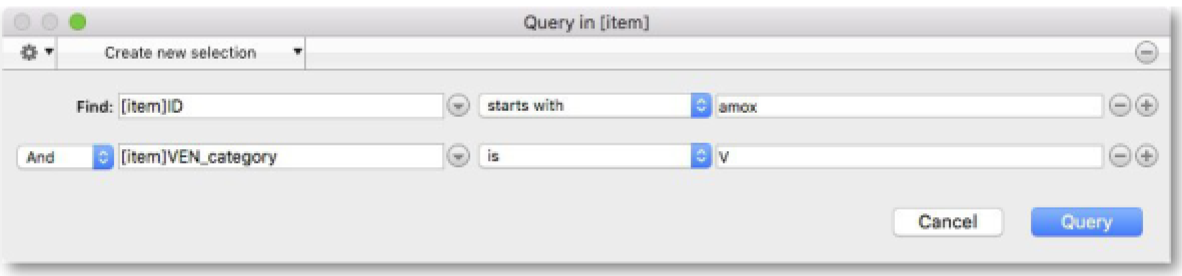
A list of the fields in each table, and what each field contains is given in section 24. Data Tables and Fields.

Using previously saved layout

Any report layouts which you have used previously, and saved, may be accessed by clicking on *File >Open* on the menu bar, and selecting the required layout.

Using the Query search editor

There are now many reports included in mSupply®, but there may still be occasions when you require a report that we have not included. The query editor is a bit daunting, but is very powerful and once you are familiar with its capabilities, your competence to access the precise information you may require from within the mSupply database will increase significantly.



When you open the Custom Report editor, it is ready to take input values for a simple single line query.

1. **The field to query**. Choose this by clicking on the Find drop-down list which allows you to also choose fields from related tables. If you want to perform related queries, see note below.
2. **The Comparator**. Choose the comparator from the list of fields by using the middle drop-down list.
3. **The Query value**. Is entered in the third box. In the example above, the field chosen is an alphanumeric field (the item ID), so an entry area is displayed where you can enter text or a numeric value - in this instance the item code “amox” has been entered. Note that you can also use the “@” symbol as a wildcard in your query value to perform “contains” queries.
4. **The Conjunction**. This does not apply to the first line of a query, but the second and any further lines need to start with a conjunction. Set the conjunction for the selected line by clicking the appropriate button in the left area of window (*And*, *Or* or *Except*)

To add lines to a query, click the *Add Line* button.

Related queries: If you want to perform related queries, you need to know a little about the internal structure of mSupply data. Please contact us if you would like a diagram of the table layouts. A simple example of a related table is that each transaction line is related to a transaction (many to one relationship). The means that you can use the information stored in the transactions table (eg invoice date, number, status, etc.) to query transaction lines.

If you have created a complex query that you might wish to use on future occasions, you can save it to your hard disk and select it again using the *Save* and *Load* buttons in the window.

Once your completed query is entered, click the *Query* button to proceed.

For more detailed information on the Query search editor see:
http://doc.4d.com/4Dv16R6/4D/16-R6/Query-editor.300-3561635.en.html

Designing a report

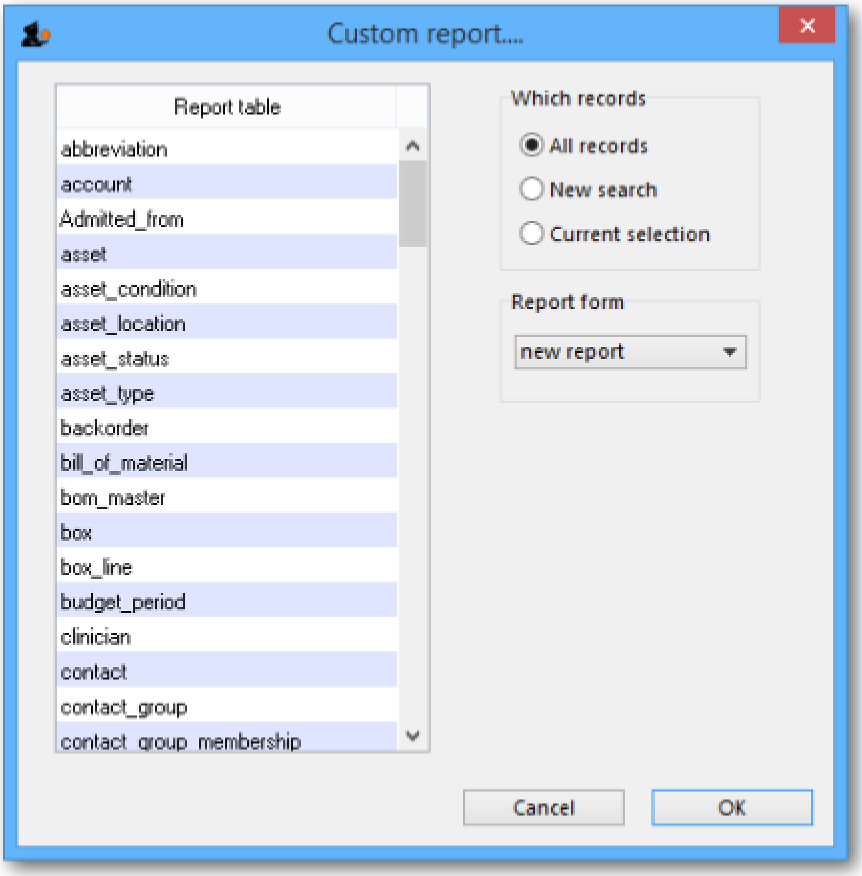
The designing of two custom report is now described:

1. listing in alphabetical order the small number of items which may be supplied to staff or customers who wish to make a purchase without a prescription. These items have already been identified by making use of their User field 2, which contains the entry “Retail permitted”.
2. listing the sources (suppliers) and the distribution (customers) of a particular batch number of an item - useful if a manufacturer recalls a particular batch of an item.

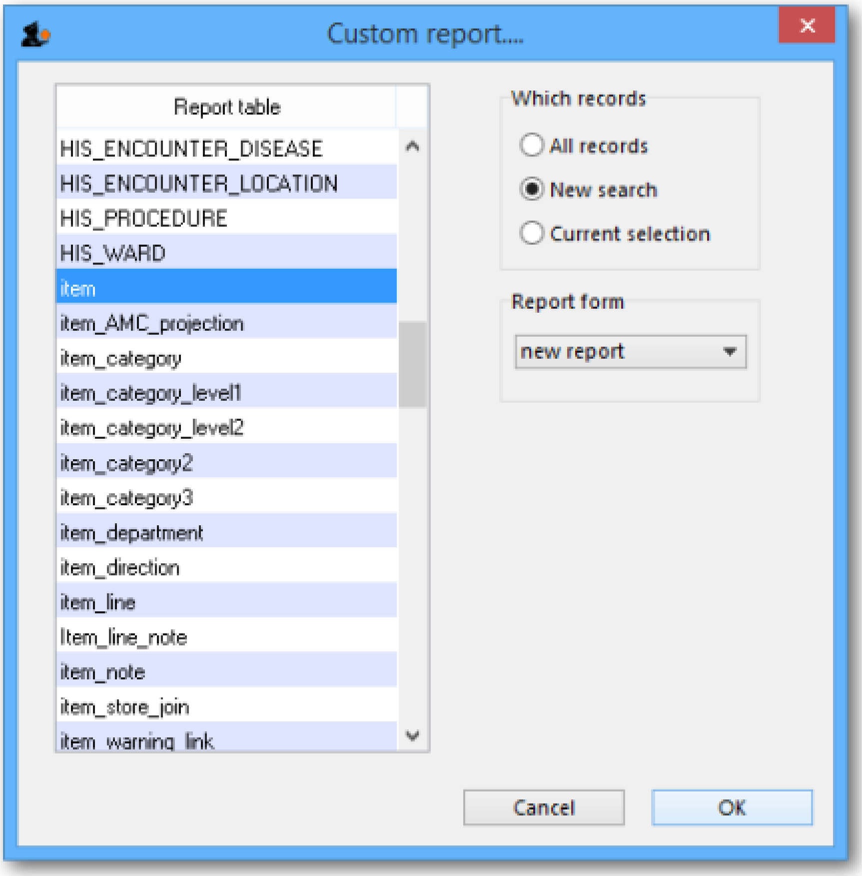
It is recommended that you study both examples, as features described in the first example will not be repeated in the second.

Report 1

Having selected Custom Report from the Reports page in the Navigator, you are presented with this window:



For our example report, we select the *Items* table, and to perform a *New Search*, using a *new report* form, so with these options selected, the window now looks like this:

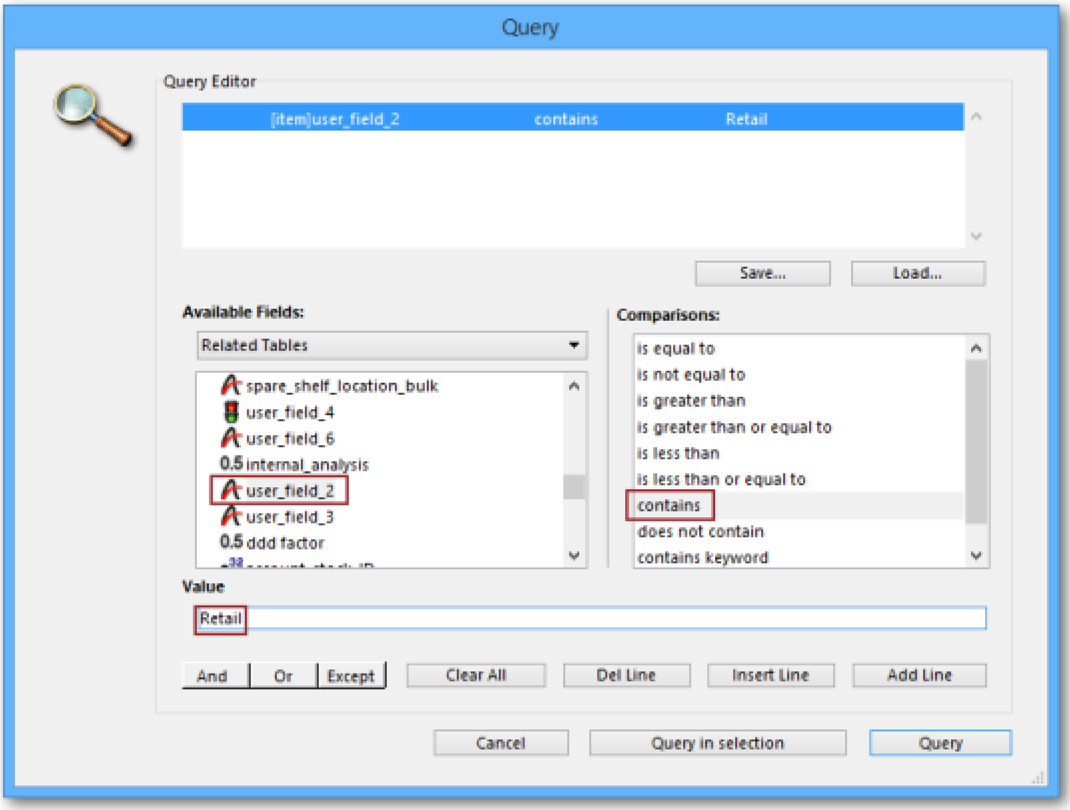


Click OK, and the Query Editor window appears, as shown in the upper figure below; this is where you specify the criteria on which you wish to create your report - in our simple example, the single criterion is that there should be stock on hand of the item. In the lower window, we have specified this by:

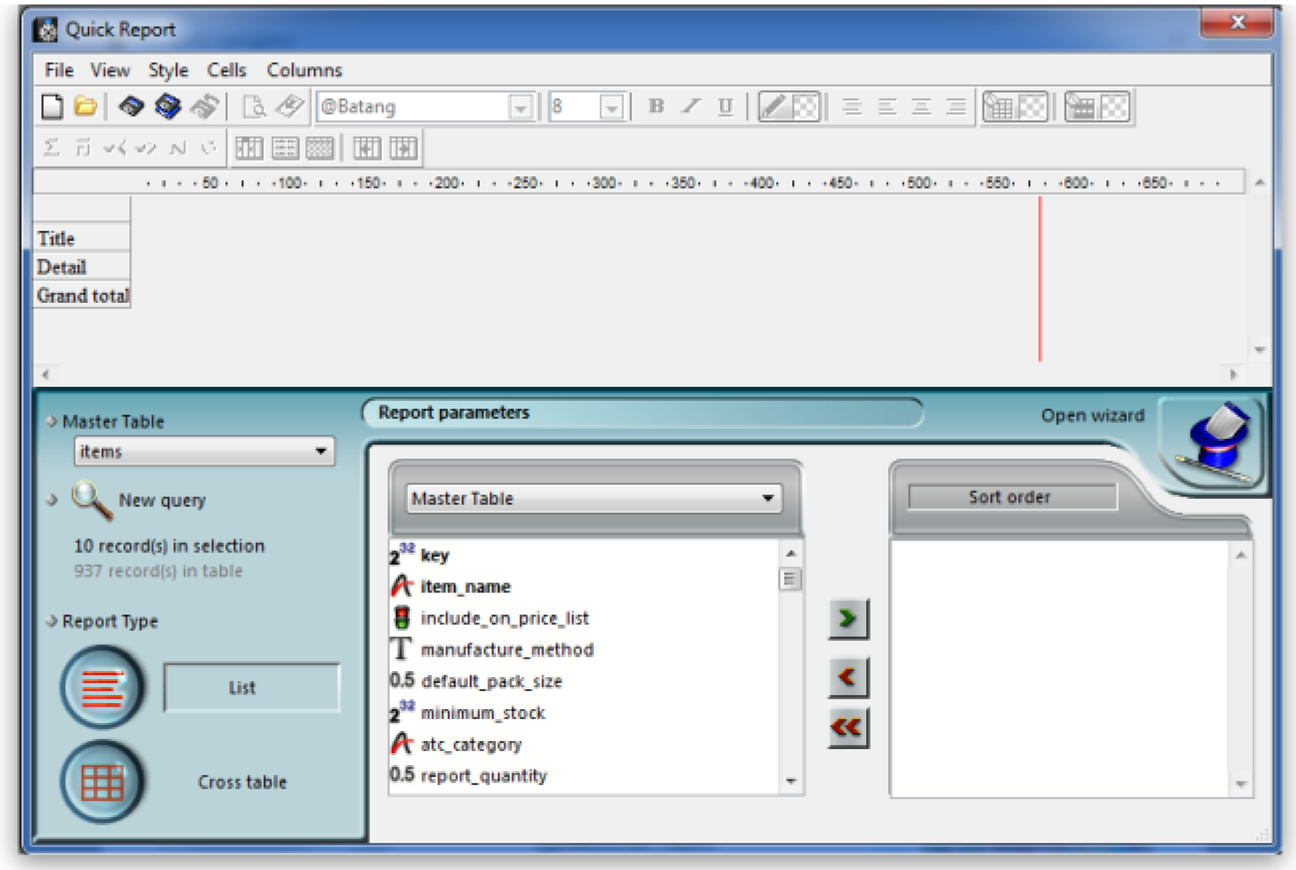
1. clicking on *user_field_2* in the *Available Fields* panel on the left,
2. clicking on *contains* in the *Comparisons* panel on the right, and
3. entering “Retail” in the *Value* panel below.

You will see that the conditions we specified now appear in the upper panel - it's always a good idea to check here to confirm that the report will conform to your specified criteria.

Now click on the Query button in the lower right corner.



The Quick Report window appears; this is where you can design the layout of the report, and specify how you want the records to be sorted:



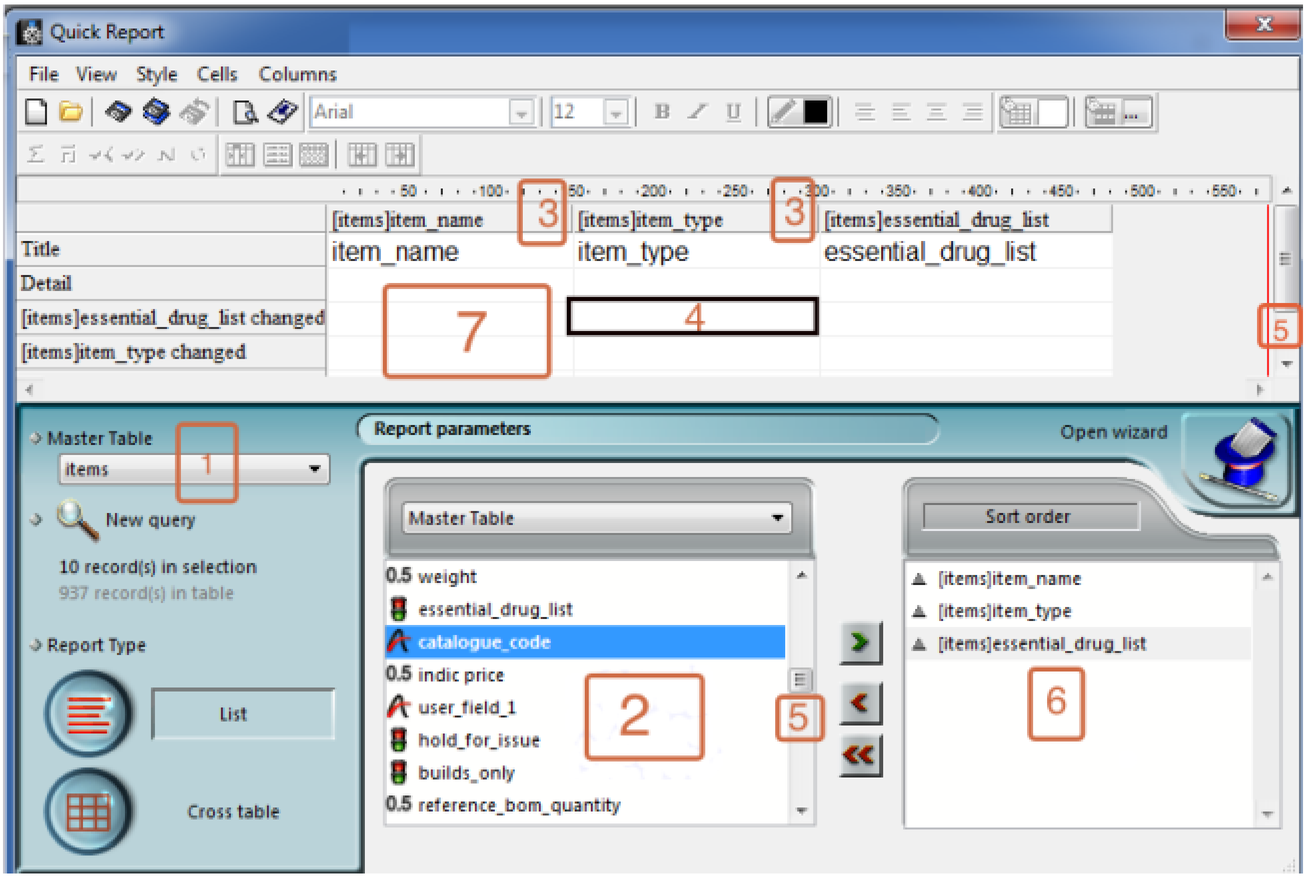
We'll start by taking a closer look at the Quick Report features.

There are two operation modes available which generate two specific types of reports: *List* and *Cross table* . Our examples are limited to the *List* mode. The *Cross table* mode *will not be described*.

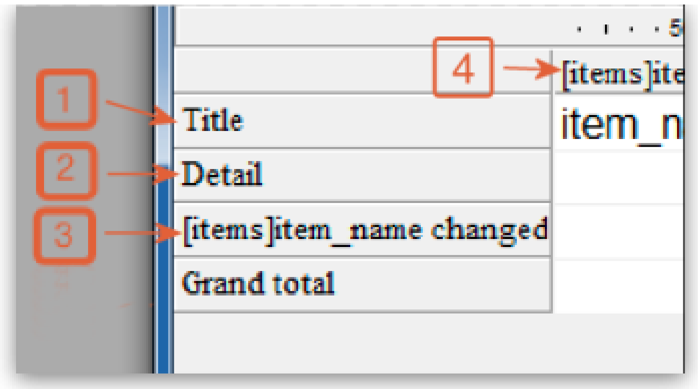
In the List mode, reports typically display records as a list with break rows where calculations are performed.

When you create a quick report, you can specify the following:

- Columns that display fields or formulas, either from the current table or from related tables.
- Sort levels and order.
- Summary calculations.
- Display format.
- Text for labels.
- Formats for numeric and Boolean data.
- Font, font size, style, and justification for labels, summary calculations, and data.
- Background colours on a cell column or row basis.
- Borders, Page headers and footers.
- Presentation style from a wide range of templates.



1. **Master Table:** This is the master table that will be used as a basis for generating the report. The fields of this table are displayed in the Fields list and the related fields will be displayed in relation to this table.
2. **Fields list:** This list lets you select the fields to be inserted into the report by double-clicking or by drag and drop. You choose the type of display in the Field selection list located just above the area. Indexed fields appear in bold. You can also display and select the fields of related tables.
3. **Column dividers:** These lines show the boundaries between columns of the report. They can be moved manually to enlarge or reduce the size of each column. Manual resizing deselects the Automatic Width option if it has been activated for the column concerned.
4. **Cells:** A cell is the intersection of a row and a column.
5. **Scroll bars:** You use the scroll bars to view parts of the quick report design that extend beyond the area of the quick report form.
6. **Sort list/Sort order display area**: This list displays the fields of the report on which the sort will be carried out, as well as the sort order and whether it will be ascending or descending. Each field inserted into this list causes a sub-total row to be added in the Quick Report area.
7. **Quick Report area:** This area lets you build your report by inserting fields using drag and drop, double-clicking or via the contextual menu; you can also adjust the width of the columns added, or delete breaks or formulas, define the colors and borders of cells, etc.



1. **Title row:** This row displays the names of fields or formulas that have been inserted into the report. It is repeated for each page of the report. The Quick Report editor inserts field names by default, but you can modify the contents.
2. **Detail row:** This row contains information drawn from each record and is repeated in the report for each record. You can associate a display format with it, depending on the type of data represented.
3. **Subtotal rows:** These rows display intermediate calculations as well as the wording that is associated with them. A row is created for each sort order.
4. **Column data sources:** These titles indicate the source of the data for each column.

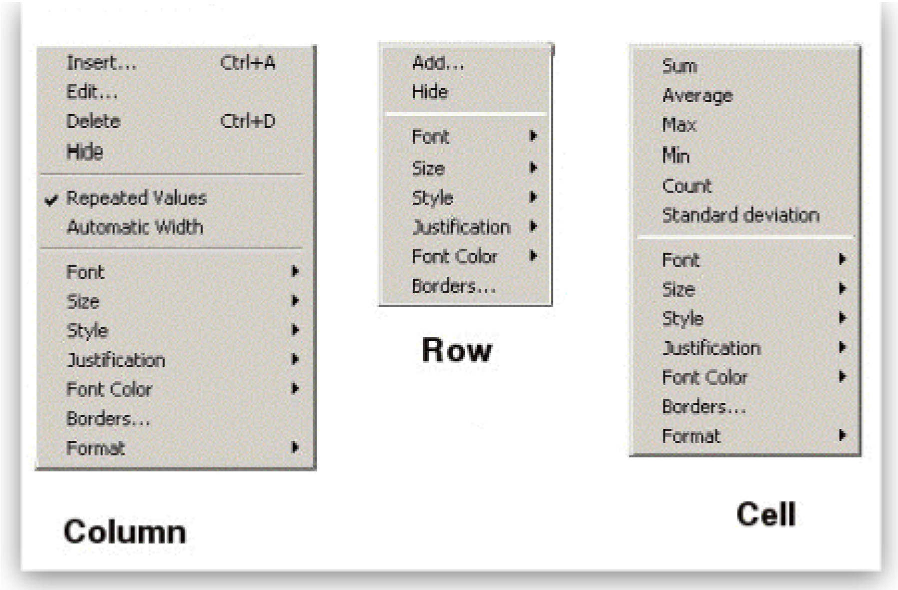
Contextual menus

The Quick Report editor has contextual menus that make it easy to access certain row, column, and cell operations. Instead of making menu selections or working with the Cell or Column properties areas, you can perform certain operations by displaying a Quick Report contextual menu.

There are separate contextual menus for row, column, and cell operations.

To use a contextual menu:

1. Position the pointer in a cell, a row title, or a column heading and hold down the right mouse button (on Windows) or press the Control key while clicking in the report area (MacOS).
   A contextual menu appears. The commands in the contextual menu depend on where your pointer is (i.e., a row label, column heading, or cell). Also, menu commands that are inappropriate for the particular row, column, or cell are disabled..
2. Choose the desired menu command:



Selecting rows, columns, and cells

When designing a Quick Report, you need to select rows, columns, and cells in the quick report form. A cell is the intersection of a row and a column.

- To select a row: - Click on the Title, Detail, Subtotal, or Grand total cells in the row label area.
- To select a column: - Click the Header row of a column.
- To select a cell: - Click the cell.

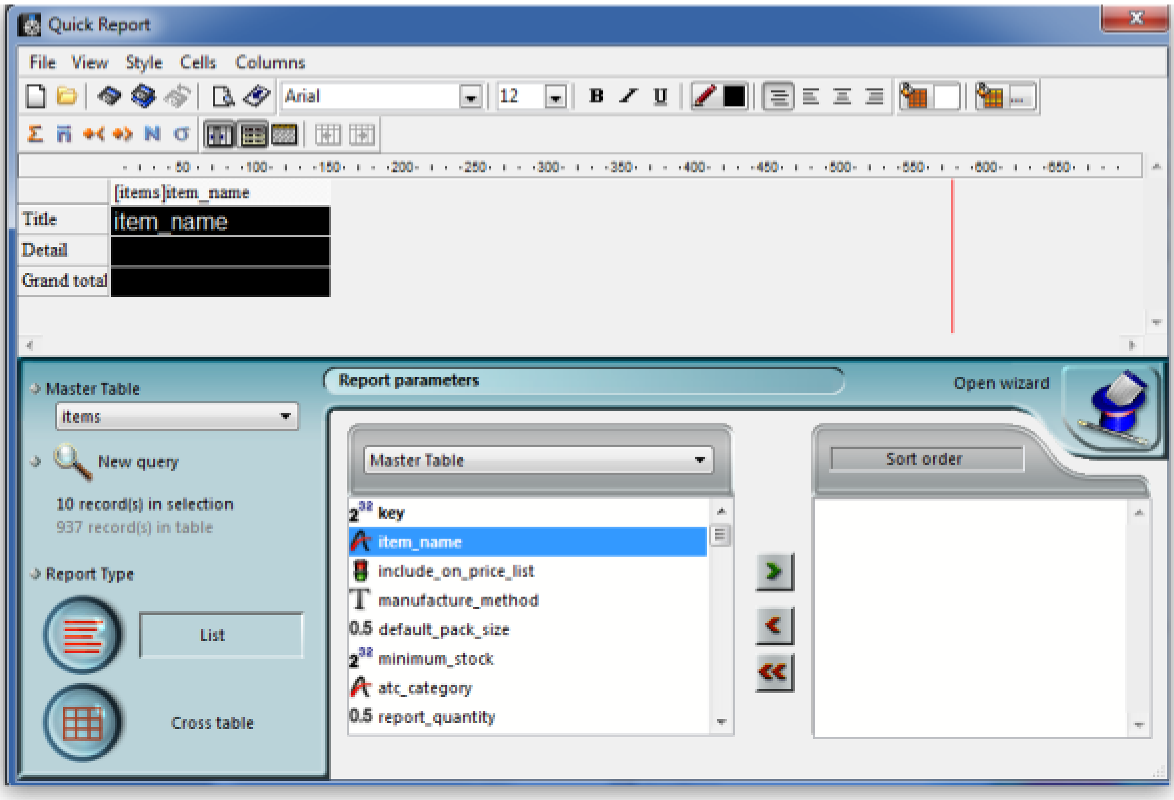
Adding and modifying text

You can add or modify text in the quick report form to label parts of the report. For example, if you requested summary calculations, you can label them by adding text to other cells in the Subtotal and Grand total rows.

You can add and modify text as follows:

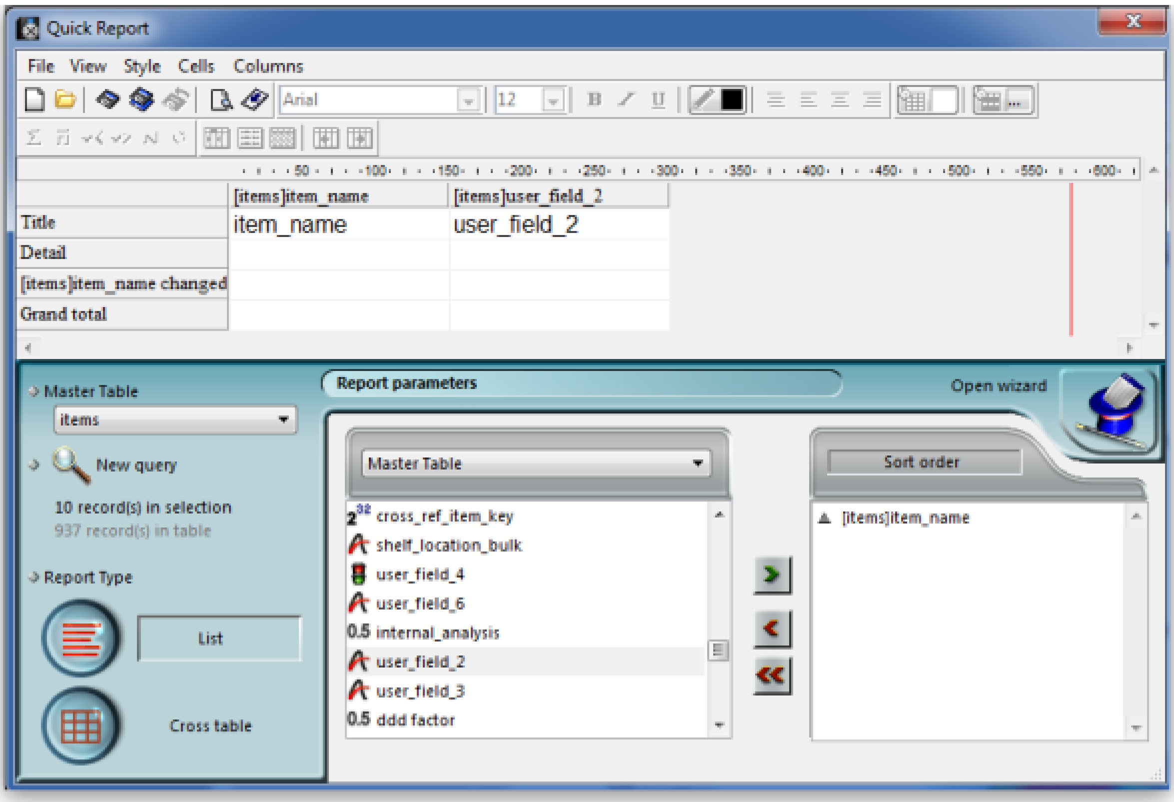
- Edit the text that automatically appears in the Title row of the report,
- Insert text in empty cells of the Subtotal and Totals rows,
- Insert the value of a Subtotal field in the Subtotal rows,
- Specify the font, font size, justification, and style for any text that appears in the report.

Returning now to our first report, we want two columns only, the first listing the items in alphabetical order, and the second confirming the entry in User field 2. This is achieved by double clicking on *item name* in the list, and then to have the list sorted alphabetically, make sure *item name* remains highlighted, and click on the green arrow in the centre:



The second column in our report will show the present stock of each item, and the same procedure is followed; select the *user_field_2* entry in the list, and double-click on it. You should be aware that items which are presently out of stock will not appear in the report.

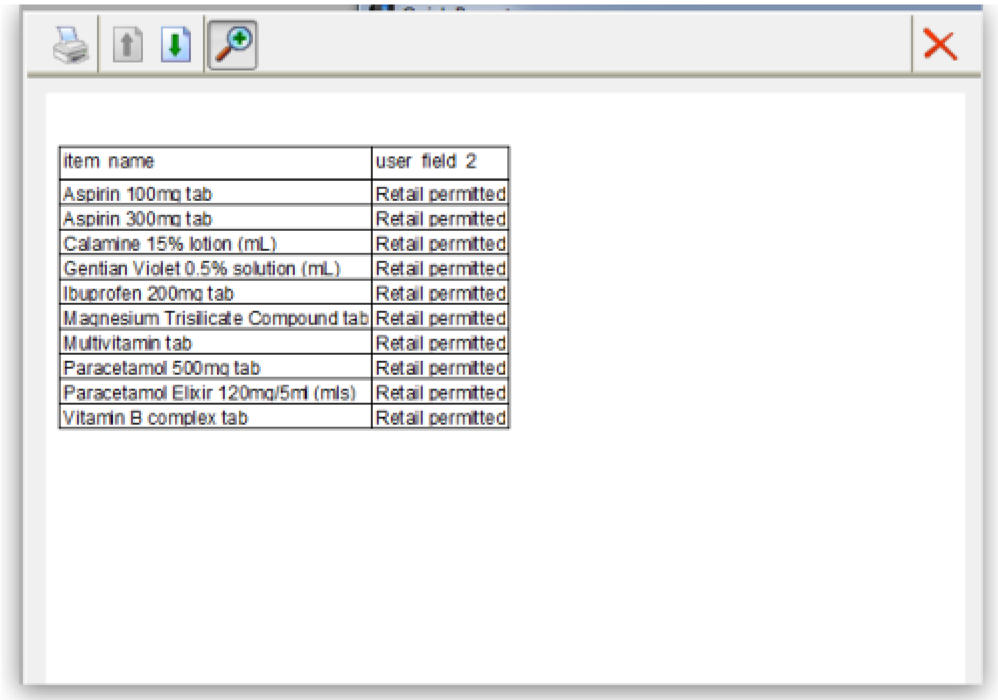
The Quick Report window should now look like this:



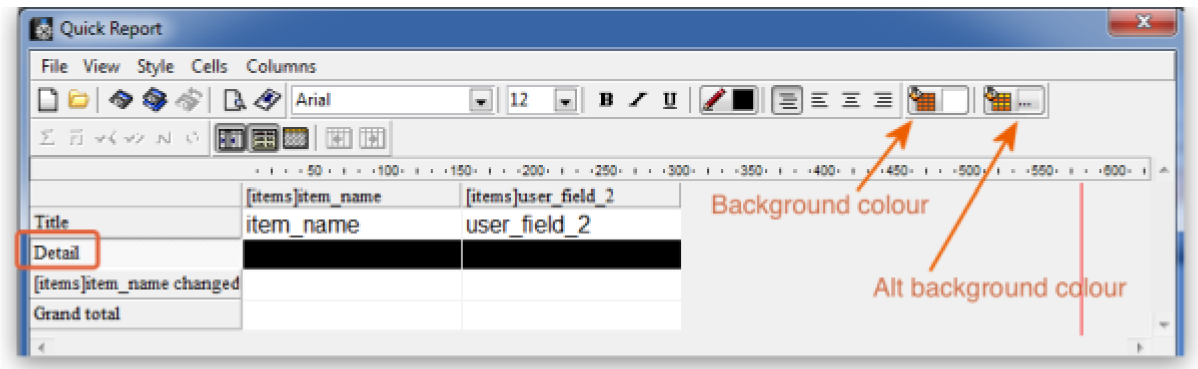
The column widths can be adjusted as appropriate by positioning the cursor on the dividing line between the column headings, clicking and dragging to the left or right until the desired column width is obtained:

The vertical red line to the right of the columns indicates the right hand edge of the page as it will be printed, so to keep the report to single page width, columns should be positioned to the left of this line.

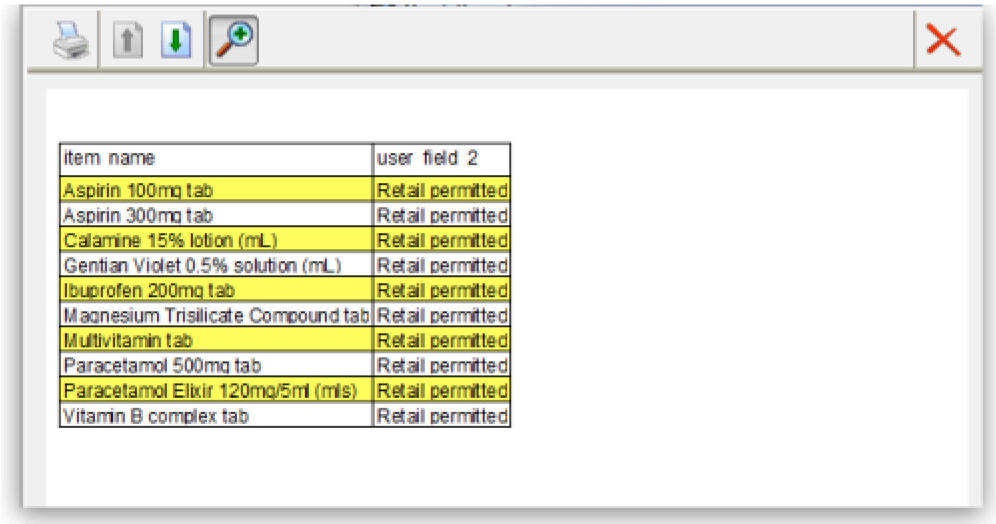
To preview on screen the report as it will be printed, click on *File* on the menu bar, and select *Print Preview*. Our example is very brief, but in reality, reports may run to two or more pages, and you can scroll through the pages of the report. This shows how our simple report will appear:



The printed report may benefit from shading or colouring of alternate rows, and this is achieved while the report format is being set. In the *Quick Report* editor, click on *Detail* to highlight the row, then click on the *Alt.background colour* icon, and a chart appears from which you can select the colour(s) of your choice.



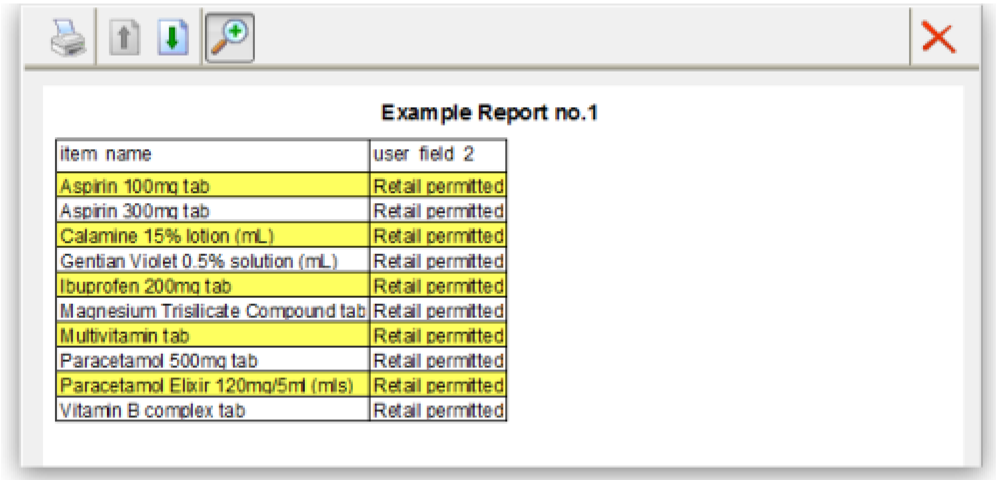
For our report, pale yellow has been selected for the alternate row colour, and the report now has this appearance:



item name	user field 2
Aspirin 100mg tab	Retail permitted
Aspirin 300mg tab	Retail permitted
Calamine 15% lotion (mL)	Retail permitted
Gentian Violet 0.5% solution (mL)	Retail permitted
Ibuprofen 200mg tab	Retail permitted
Magnesium Trisilicate Compound tab	Retail permitted
Multivitamin tab	Retail permitted
Paracetamol 500mg tab	Retail permitted
Paracetamol Elixir 120mg/5ml (mls)	Retail permitted
Vitamin B complex tab	Retail permitted

Adding report title

You may want to give your report a title to appear at the head of each page; this is achieved by clicking on *File* , then *Header and Footer* ; a window appears in which you can create and/or edit such a header You will most probably want the header to appear in the centre of the line, and in this case, type your entry into the *Center* panel in the *Text Settings* area; here you can also select the font of your choice, and features such as bold, underlined, etc.; these apply only to the header, not to the body of the report. A title has been added to our example:



Example Report no.1

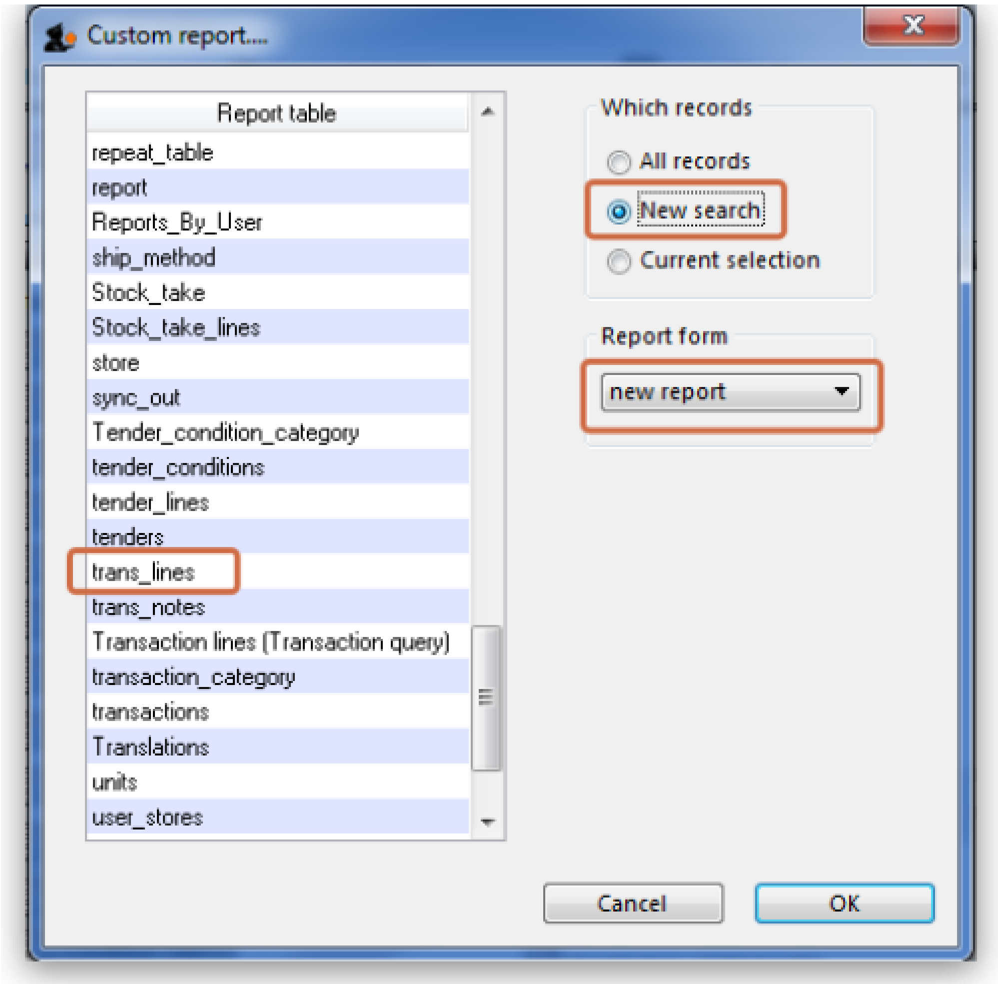
item name	user field 2
Aspirin 100mg tab	Retail permitted
Aspirin 300mg tab	Retail permitted
Calamine 15% lotion (mL)	Retail permitted
Gentian Violet 0.5% solution (mL)	Retail permitted
Ibuprofen 200mg tab	Retail permitted
Magnesium Trisilicate Compound tab	Retail permitted
Multivitamin tab	Retail permitted
Paracetamol 500mg tab	Retail permitted
Paracetamol Elixir 120mg/5ml (mls)	Retail permitted
Vitamin B complex tab	Retail permitted

To print the report, click on *File* on the menu bar, and select *Generate* and - provided that your printer is connected, online and loaded with paper - your report will be printed.

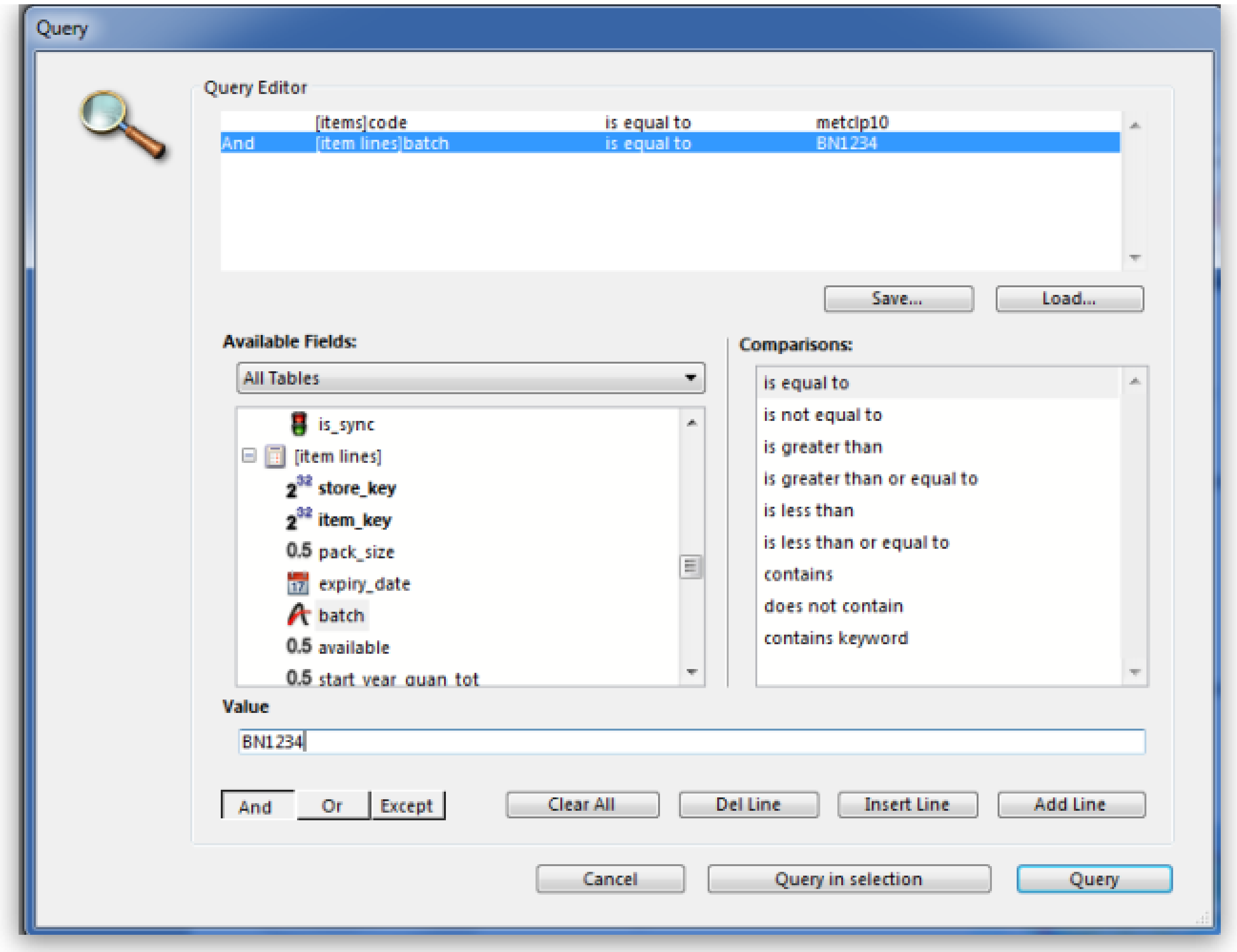
Report 2

The second report lists the sources (suppliers) and the distribution (customers) of a particular batch number of an item - useful if a manufacturer recalls a particular batch. The item chosen for our example is Metoclopramide 10mg tablets, the code for which is Metclp10, and the batch no.is BN1234

Having displayed the custom report window, this report requires us to select the *trans_lines* table, and to perform a New Search, using a new report form:

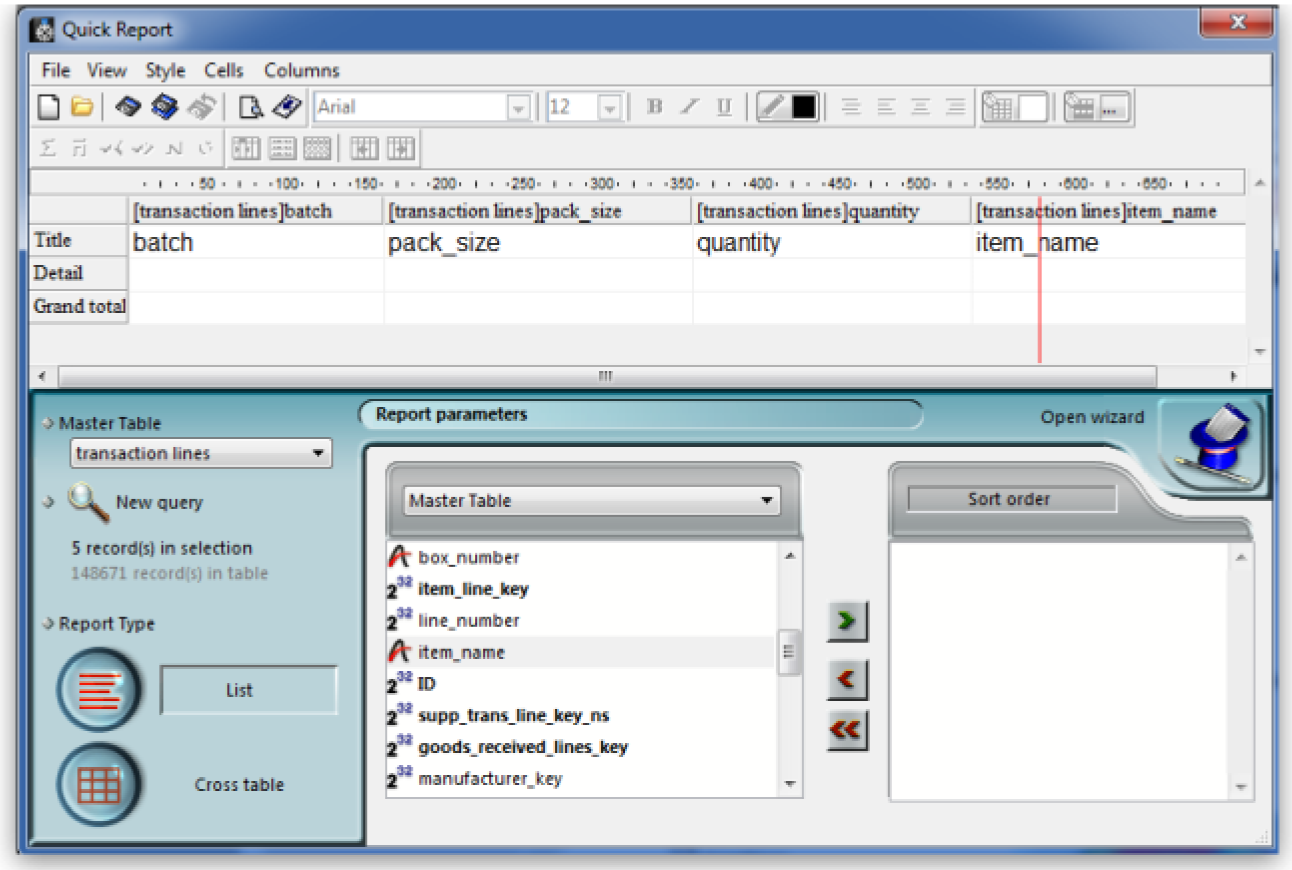


When the Query Editor window appears, expand the [Items] table, and once expanded, move down the list until *code* appears, and select it by clicking on it;the upper panel now shows *[items]code* , the default comparator *is equal to* ,and so to complete the line, move the cursor to the *Value* entry panel in the lower part of the window and enter 'metclp10'. Click on *Add Line* and accept the default conjunction *And* ; In the *Available Fields* panel, shrink the *[Items]* table, expand the *[item_lines]* table and select *batch*, accept the *is equal to* comparator, and enter 'BN1234' in the *Value* entry panel. You have now defined the criteria for the report, and the Query Editor window should look like this:

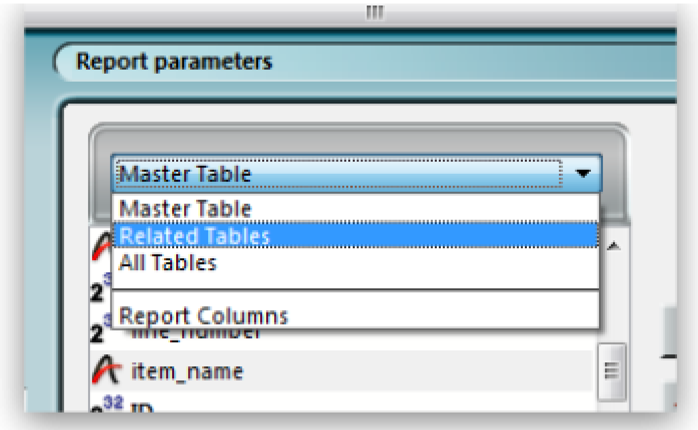


You are now ready to click on the *Query* button.

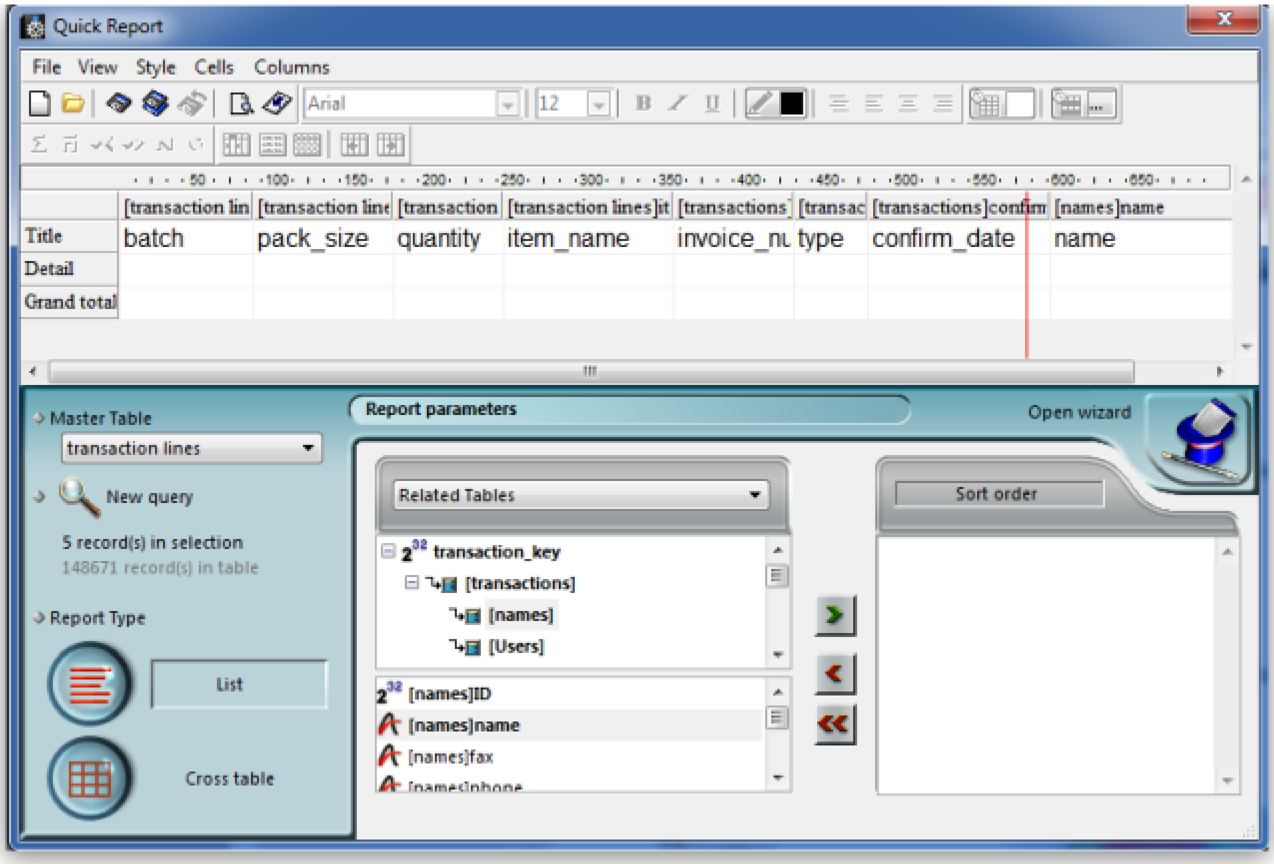
The Quick Report design window appears, with the Master Table - in this example the 'Transaction lines' table - expanded for selection of the fields required by our report; we'll be using four fields from the master table, namely item name, batch, pack and quantity; double-click on each of these in the list, and the Quick Report design window should appear as shown:



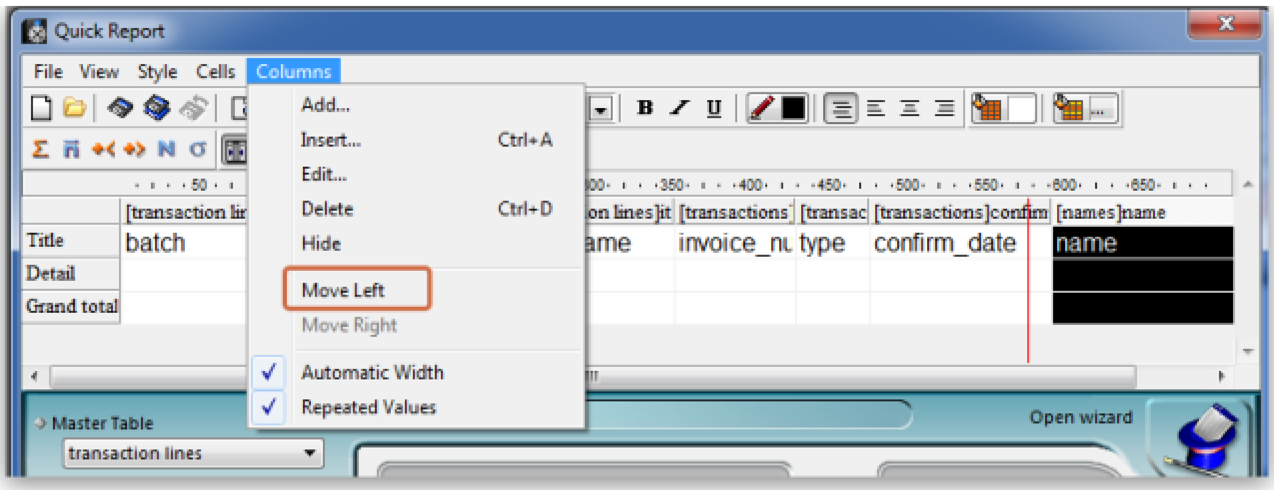
Don't be concerned at the order in which these fields appear in the report - we'll rearrange the order once all the fields have been selected. The fields we now need to add are in other tables; presently *Master Table* is selected ,and we need *Related Tables* , which is selected from the drop-down menu.



The table to access is the *Transactions* table, and the fields we require are *Invoice number*, *type*, and *confirm date*. Double-click on each, then expand the *Names* table, and double-click on *[names]name*.



All eight fields for the report are now selected, and we can arrange them in their required order. This is easily performed by selecting the column to be repositioned - we want the item name to be the first column, so we select it by clicking on the column heading, and move it by clicking on the 'Move Left' icon.



Select and move the columns using the 'Move Left' icon and the 'Move Right' icon until the column order from the left is:

- Item_name
- Batch
- Name
- Type
- Invoice_num
- Confirm_date

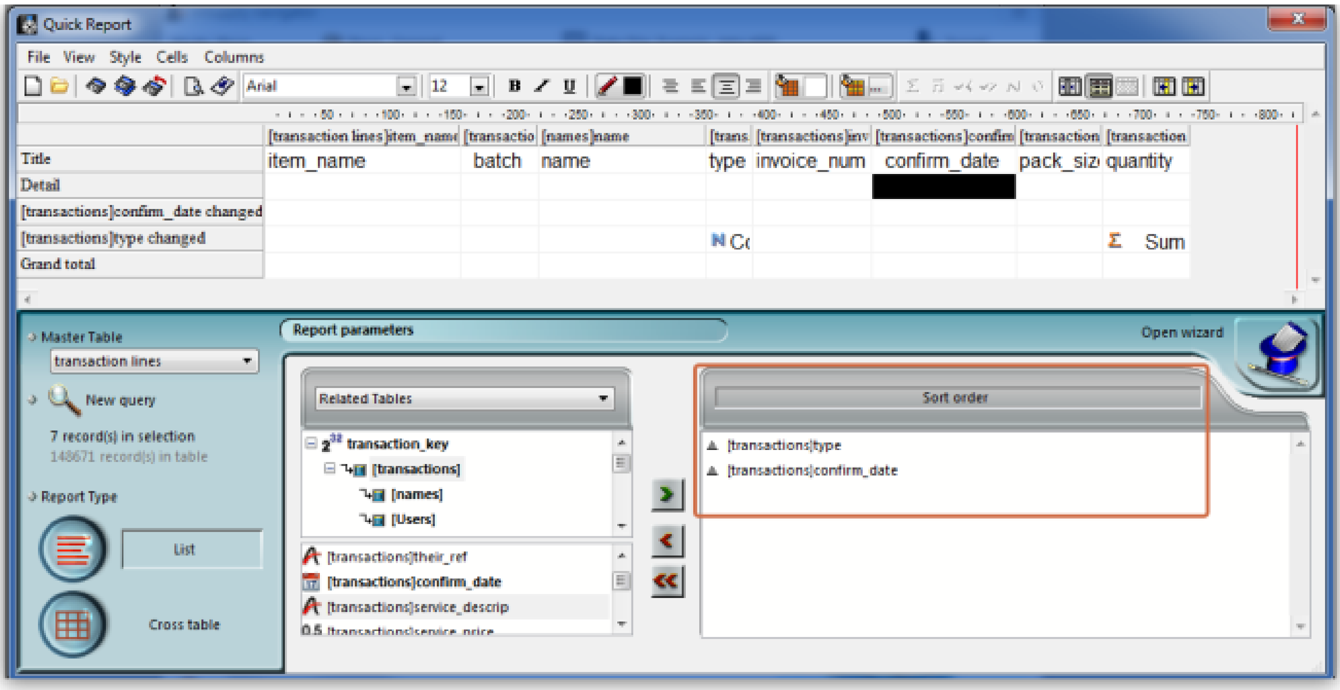
- Pack_size
- Quantity

The report will look better in landscape rather than portrait form, so click on *File* > *Page Setup* , and select *landscape* Once you have done this, you can view your report on screen by clicking on the 'Print preview' icon.

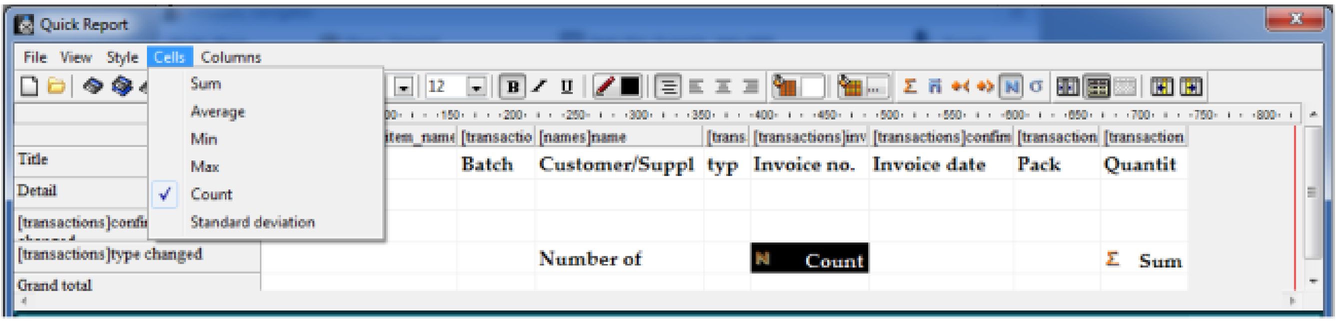
The next steps are :

1. to sort the report
2. to perform some simple calculations
3. to display this information.
4. to adjust the column widths

All these are simple to perform on the Custom Report window:



1. Sorting the report. Drag and drop in the 'Sort order' panel the parameters required - in this example [Transactions]type and [Transactions] confirm_date.
2. Performing calculations and displaying the information. We need to count the number of transactions, and display the totals involved. Observe the two rows added to the report annotated with the sort parameters followed by 'change'; these are the break points in the report, and the results of any calculations are displayed in these rows ..... here's how:
    1. position the cursor in the *Invoice* column on the *[Transactions]type changed* row
    2. click *Cells* on the menu, and check *Count*; we need to know how many customers have been supplied with this batch, so the Count icon is inserted in the row - it does not matter which column has the Count icon - for the time being it is entered in the 'Invoice' column, and the reason for this will soon become apparent.
    3. also required is the total quantity ordered, and the total quantity distributed, so the cell in the same row but in the *Quantity* is selected, and this time the *Sum* box is checked in the Cells drop down list.



1. Column widths can be adjusted as described earlier, and having a look at the Print preview will enable appropriate widths to be defined.

The report should now appear something like this:

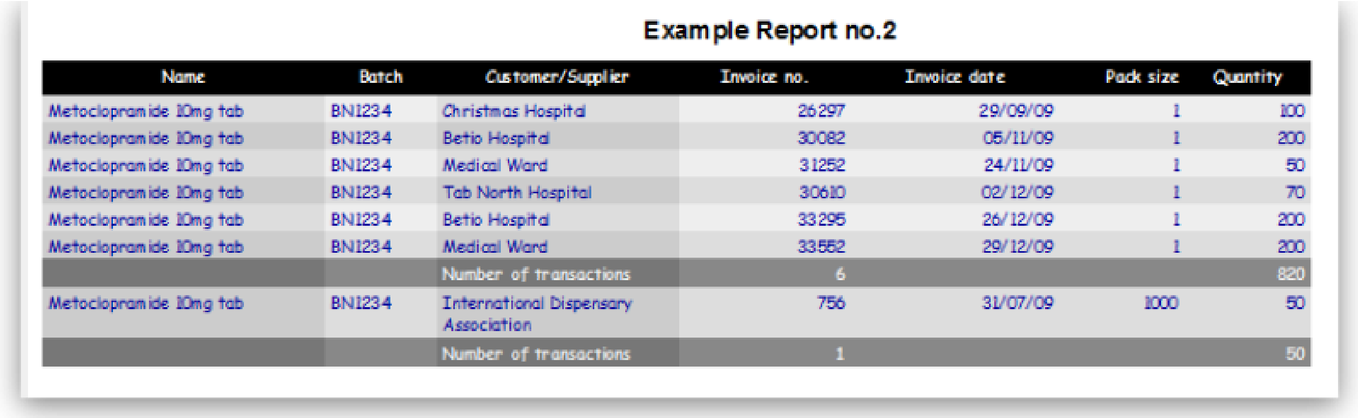
Example Report no.2

item name	batch	name	type	invoice num	confirm date	pack size	quantity
Metoclopramide 10mg tab	BN1234	Christmas Hospital	ci	26297	29/09/09	1	100
Metoclopramide 10mg tab	BN1234	Betio Hospital	ci	30082	05/11/09	1	200
Metoclopramide 10mg tab	BN1234	Medical Ward	ci	31252	24/11/09	1	50
Metoclopramide 10mg tab	BN1234	Tab North Hospital	ci	30610	02/12/09	1	70
Metoclopramide 10mg tab	BN1234	Betio Hospital	ci	33295	26/12/09	1	200
Metoclopramide 10mg tab	BN1234	Medical Ward	ci	33552	29/12/09	1	200
			6				820
Metoclopramide 10mg tab	BN1234	International Dispensary Association	si	756	31/07/09	1000	50
			1				50

Only two tasks remain! It's not necessary to display the Invoice type, so this column may be hidden - right click on the column heading, and from the contextual *Column* menu, click on 'Hide'.

mSupply® by default enters the field name in the displayed column heading, but you can edit these column headings by double clicking on the cell in the 'Title' row, when an insertion point cursor appears and the current entry is highlighted; you can replace the default text with whatever you consider appropriate. This has been done in our example.

Finally, there is a large selection of presentation styles available, any of which can be applied to your report. On the menu bar, click on *Style* > *Presentation*. In our example, after defining a header for the report, we have opted for *Report 1*, giving our report the appearance you see below.



Example Report no.2

Name	Batch	Customer/Supplier	Invoice no.	Invoice date	Pack size	Quantity
Metoclopramide 10mg tab	BN1234	Christmas Hospital	26297	29/09/09	1	100
Metoclopramide 10mg tab	BN1234	Betio Hospital	30082	05/11/09	1	200
Metoclopramide 10mg tab	BN1234	Medical Ward	31252	24/11/09	1	50
Metoclopramide 10mg tab	BN1234	Tab North Hospital	30610	02/12/09	1	70
Metoclopramide 10mg tab	BN1234	Betio Hospital	33295	26/12/09	1	200
Metoclopramide 10mg tab	BN1234	Medical Ward	33552	29/12/09	1	200
		Number of transactions	6			820
Metoclopramide 10mg tab	BN1234	International Dispensary Association	756	31/07/09	1000	50
		Number of transactions	1			50

At some time in the future, you may wish to run your reports again. You should, therefore, save a copy of each report in the *Custom Reports* folder; this is performed by clicking on *File* on the menu bar, and selecting *Save* or *Save as*, giving the report a name, and saving it in the *Custom Reports* folder, or any other appropriate location of your choice. Then when you're ready to run the report next time, having specified your criteria in the *Query Editor*, when the *Quick Report* window first appears, click on *File* on the menu bar, select *Open,* and retrieve the desired report from its saved location, preview it and print it.

Using custom methods in quick report columns

Sometimes you will need to use a custom method in a column to extract data from a related table.

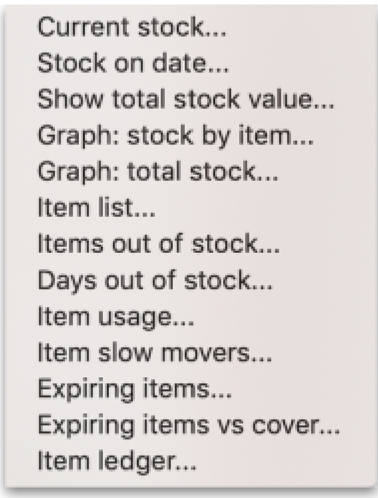
The following methods are available.

Method	**Description**	**Parameters**
date_day_number_to_text	returns 1 for Sunday, 2 for Monday etc.	
qr_account_code_return	Returns the account code of an item	item_id
qr_flag_value_change		
qr_get_currency		
qr_get_current_patients_stat		
qr_get_item_store_field	return value of field as text	1:item.id 2:“price” or “is_in_catalogue” or “sellprice”
qr_get_location-from_key		
qr_get_loc_from_key_new_process		
qr_get_Name_code_from_key		
qr_get_stockOnHand_from_itemKey		
qr_get_store_name		
qr_keep_accumulative_value		
qr_ns_customer		
qr_responsible_officer		
qr_ship_method		

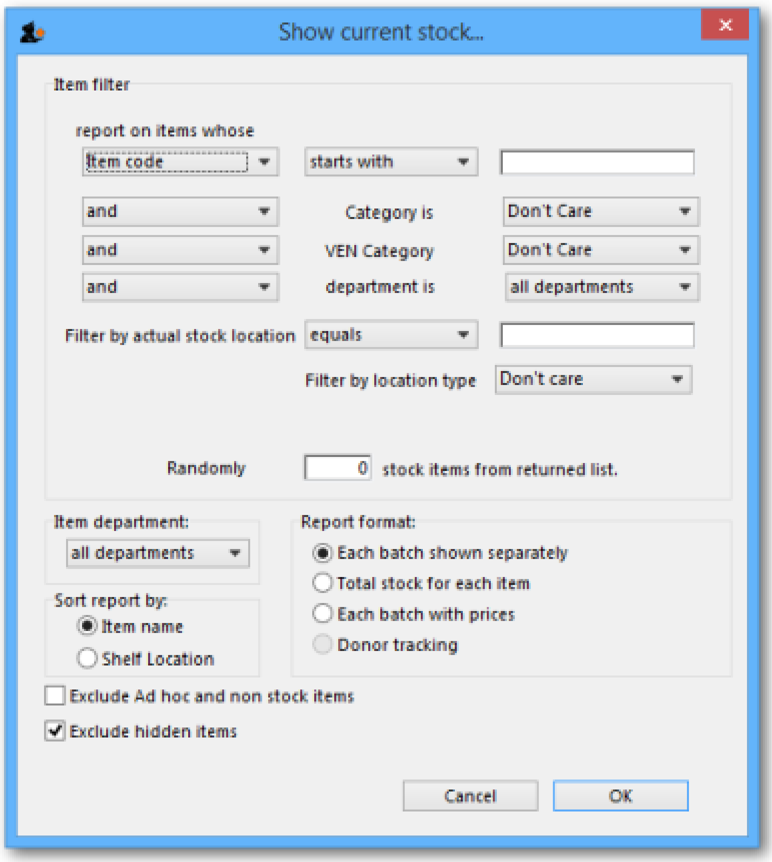
Previous: ***13.13. Saving report templates*** | | *Next:* ***13.15. SuperReport editor***

13.02. Stock and items reports

When **Reports > Items and Stock** is chosen, a range of available reports are displayed; click on the one you require to select it:



Current stock



A report will be produced that lists each stock line that is currently showing stock greater than zero. Should you wish the report to include items/batches with zero stock, the box in the lower left needs to be checked.

Item filter

A “Item filter” allows you to enter the normal find item filter criteria to choose which items to include.

Random

A 'Randomly' filter allows you to enter a number of items that will be randomly chosen, and stocktake sheets for those items printed. This facilitates spot checking of your actual stock situation.

Additional options

Should you wish the report to be department specific, then that department should be selected from the drop down list of the departments which you have created.

Should you wish the report to give information on a particular location, then that location should be specified , selecting the appropriate operator of the three available in the drop down box alongside the *Filter by actual stock location* option.

Report format

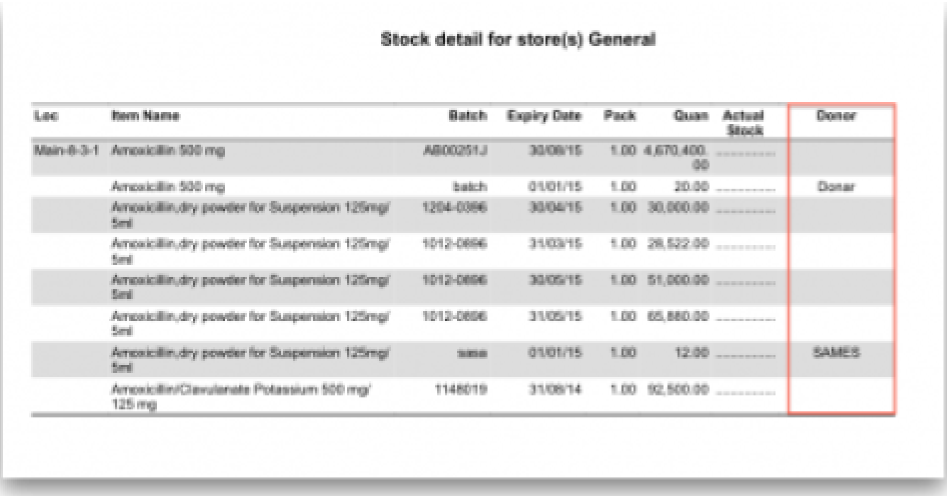
You can choose from three formats:

- “Each batch shown separately” will also give you a column on the right where, having done a physical stocktake, you can enter the quantity that is actually in stock, allowing any corrections to be made in mSupply.
- “Total stock for each item” will not show individual batches, but the total quantity on hand of each item.
- “Each batch with prices” List the price of each batch in stock, with a total at the end of the report.
- “Donor reporting” select this to see donor information - see the 'Donor reporting' section below.
- “Items in rows, Donors in columns” shows eaxactly what it says in the report!
- “Items in rows, Stores in columns” shows a row for each with columns for each store. The cells contain the number of units of the item in each store. Must be run in supervisor mode (see the 26.01. Miscellaneous topics page for details).

The lines are reported alphabetically either by item name or shelf location, depending on what you have chosen in the “Sort report by” options

Donor reporting

mSupply provides the feature of printing the Donor name on the Current Stock report so that organisation donating the goods can be identified and tracked.



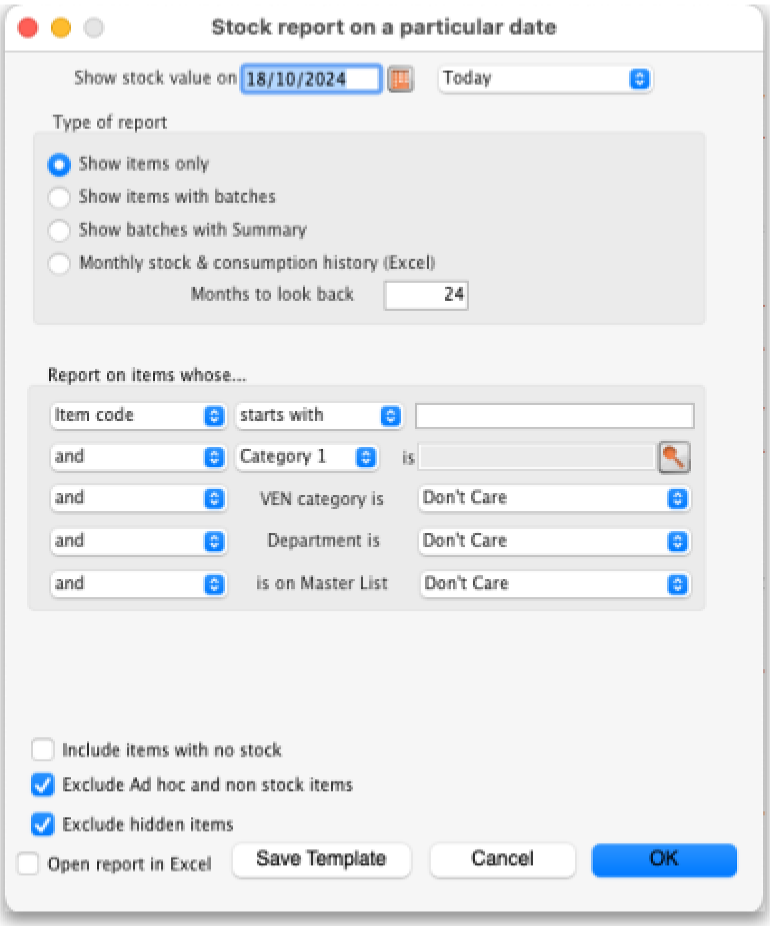
Stock detail for store(s) General

Loc	Item Name	Batch	Expiry Date	Pack	Quan	Actual Stock	Donor
Main-8-3-1	Amoxicillin 500 mg	AB00251J	30/08/15	1.00	4,670,400.00	....	
	Amoxicillin 500 mg	batch	01/01/15	1.00	20.00	....	Donar
	Amoxicillin,dry powder for Suspension 125mg/5ml	1204-0386	30/04/15	1.00	30,000.00	....	
	Amoxicillin,dry powder for Suspension 125mg/5ml	1012-0696	31/03/15	1.00	28,522.00	....	
	Amoxicillin,dry powder for Suspension 125mg/5ml	1012-0696	30/05/15	1.00	51,000.00	....	
	Amoxicillin,dry powder for Suspension 125mg/5ml	1012-0696	31/05/15	1.00	65,880.00	....	
	Amoxicillin,dry powder for Suspension 125mg/5ml	sasa	01/01/15	1.00	12.00	....	SAMES
	Amoxicillin/Clavulanate Potassium 500 mg/125 mg	1148019	31/08/14	1.00	92,500.00	....	

Stock on date

This report allows you to produce a report for the stock in your store on a particular date. The stock shown will be the stock at the END of the day. If you want to see the stock at the beginning of the day, choose the day before in the date selector.

You are shown a window like this:



Enter the date for which you wish to show the stock for.

Type of report

You have 3 options:

1. *Show items only*: each item in your system will have a single entry with the total quantity on that date.
2. *Show items with batches*: each batch, its expiry and batch number along with the quantity of stock will be shown.
3. *Show batches with summary*: as 2, but every item has an aggregate line before the lines for each batch, showing the total quantity for all batches of the item. So it's a bit like a combination of 1 and 2.
4. *Monthly stock & consumption history (Excel)*: Each item has 3 rows showing its consumption, days it was in stock and its mean stock on hand for each month from the current month to the number of months in the past selected in the **Months to look back** field.

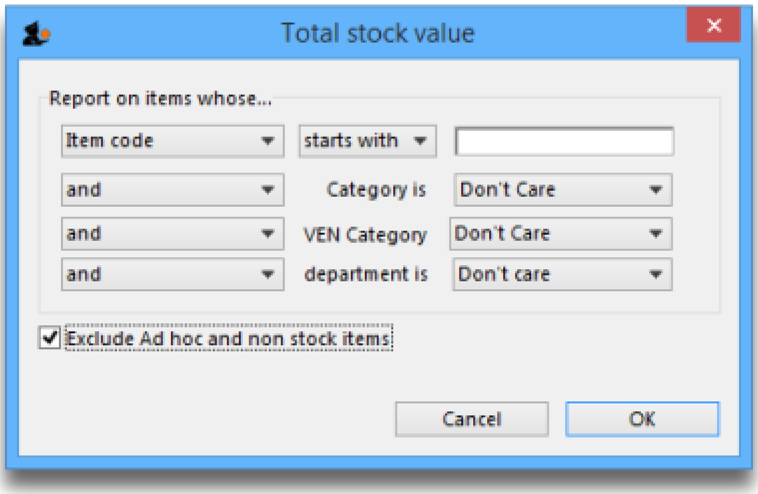
The *Report on items whose* box allows you to restrict the report to certain items only, using item properties or different categories as filters.

If custom stock fields are set to be used in the datafile then they will also be shown in filters beneath the item filters.

Open report in Excel

Check this checkbox to view the report directly in your chosen Spreadsheet program.

Show total stock value



This report is used to find the total stock value either for a particular department or all departments. The drop down menus allow customisation of your report by entering appropriate search criteria from the many options.

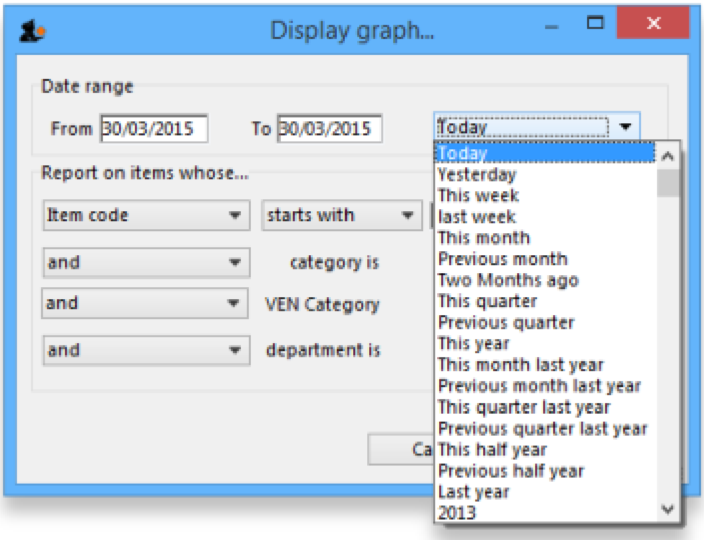
Check this checkbox to directly open the report in Excel rather than printing.

Graph: stock by item

This report shows a graph for an item or items showing the quantity of stock on hand for each day over a defined period.

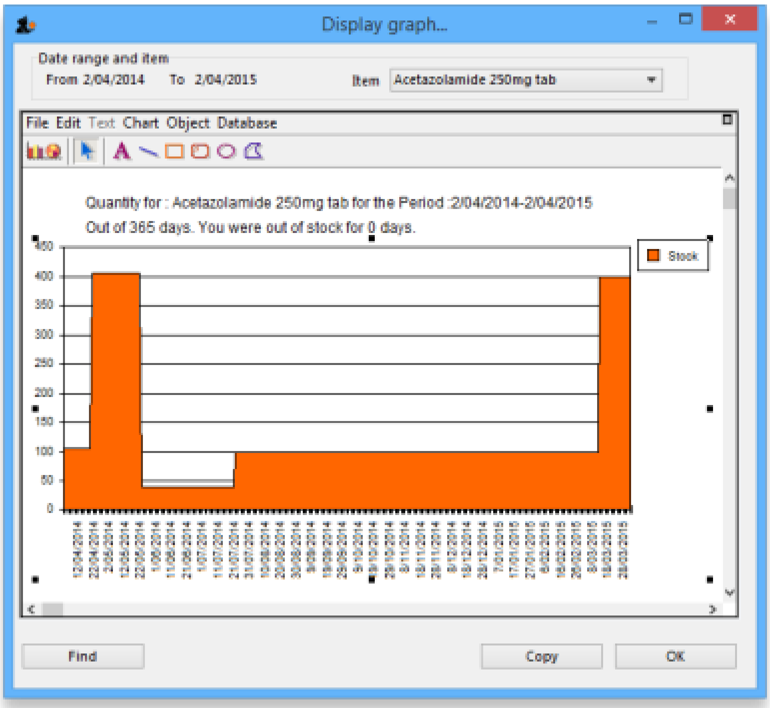
Note that if you have allowed editing of *confirm dates* on transactions, mSupply's ability to calculate accurately the data used in this report may be affected.

Choosing this item from the menu displays this window:



Enter the date range, or select the required period from the drop down list, the items on which you wish to report, and appropriate filters, if any. Remember you can use the item flag field to select an ad hoc list of items to include in your report.

Clicking OK displays a window where you are shown a graph of the quantity in stock on each day for the first item that matched the criteria you entered.

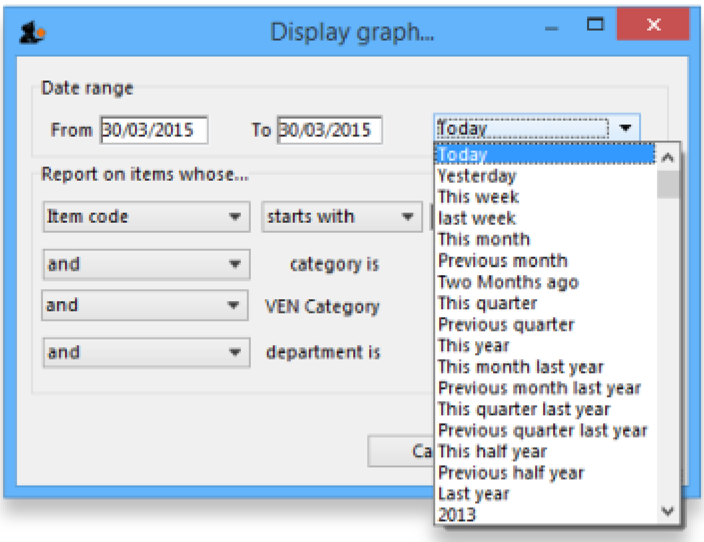


This window also displays a list of items that were found. To display the graph for a different item, choose it from the list.

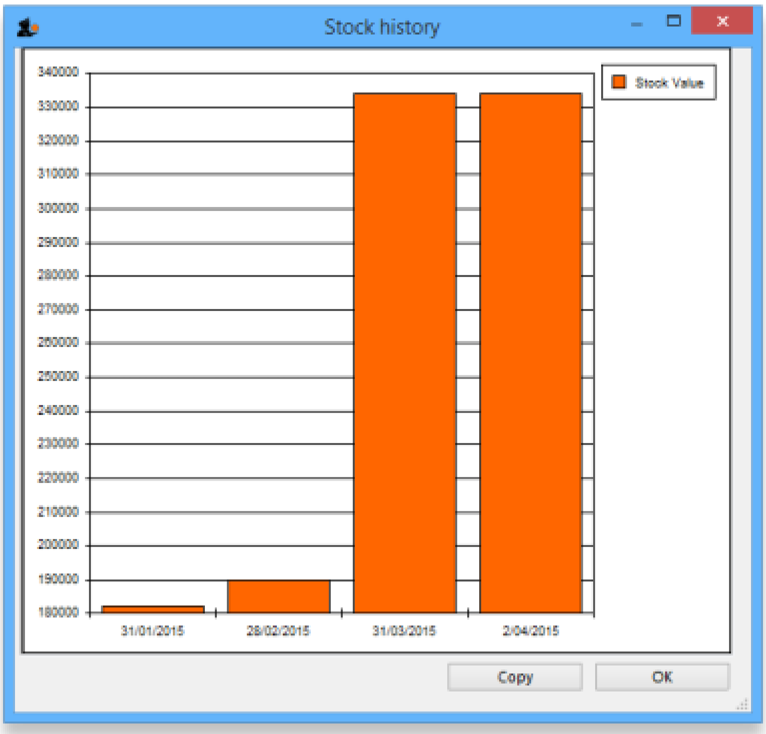
This report can be used as one of a set of key indicators for performance of a facility by comparing days out-of-stock of key items from one year to the next.

Graph: total stock

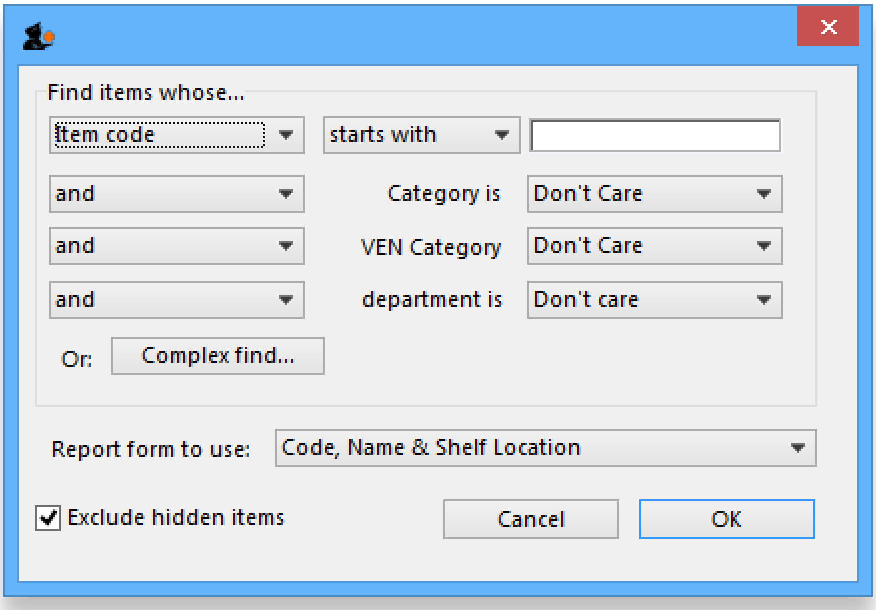
The total stock graph report allows you to view the value of your stock over a desired period of time. When you choose total stock graph, you are able to enter the required period which you would like to view:



Select OK and a graphical stock history report showing stock value will be displayed



Item list



This report allows you to print a list of you items in certain formats.

There are 3 options in the **Report form to use** drop down list:

- *Code, Name and Shelf Location*: Shows exactly what is says with current stock on hand:

Item list report: for store(s) Tamaki Central Medical Store

code	item name	Item Location	Stock on hand
030063	Acetylsalicylic Acid 100mg tabs	A1.B01.C3	199300
030062	Acetylsalicylic Acid 300mg tabs	B1	4000
030453	Amoxicillin 250mg tabs	-	6506500
050457	Amoxicillin Dry Powder for Suspension 125mg/5ml Bot/100ml	B1	420
041011	Artesunate Injection Ampoule/60 mg	A1.B01.C3	5750
201116	Bandage W.O.W. 15cm wide x 5m roll	A1.B01.C3	4308
047288	Benzyl penicilin Injection 1000000 Unit	B3	850
047290	Benzyl penicilin Injection 500.0000 Unit (300 mg)	A2.01.C	50150
031661	Captopril scored 25mg tabs	A2.01.C	47000
78373	Clotrimazole cream 60 ml	-	2300
042304	Cloxacillin Sodium Injection Powder Vial/500mg	A1.B01.C3	350
12653	Cotrimoxazole syrup 5ml	-	7350

- *Code, Name, Shelf Location with Item Long Description*: Shows the same as the previous one but includes the Item long description.
- *List of items in Catalogue*: Shows item details including the catalogue pack size and item custom field 6 value all separated out by the hierarchical item category 1. Looks like this:

List of Items in Catalogue

Dressings

Dressings

DRESSINGS

Code	Description	Item Category 2	VEN	Catalogue Pack size	user_field_6
201116	Bandage W.O.W. 15cm wide x 5m roll		V	12	534

Medicines

Anit-infectives

ANTI-INFECTIVES

Code	Description	Item Category 2	VEN	Catalogue Pack size	user_field_6
050457	Amoxicillin Dry Powder for Suspension 125mg/5ml Bot/100ml		V	10	273
042304	Cloxacillin Sodium Injection Powder Vial/500mg			50	201
047283	Penicillin Benzyl Penicillin PFI 1 MU=600 mg		V	50	238
047287	Penicillin Procaine Benzyl PFI 3 MU=3g			25	241
038510	Potassium Permanganate Aqueous Solution 1:10,000		E	1	
049542	Vancomycin HCL Injection Vial/250mg			1	264
049543	Vancomycin HCL Injection Vial/500mg		E	1	265

ANTI-TUBERCULOSIS

Code	Description	Item Category 2	VEN	Catalogue Pack size	user_field_6
098350	TB Rifampicin+Isoniazid (R+H) 150/150mg tabs			672	419

Cardiac

ANTI-ANGINAL

Code	Description	Item Category 2	VEN	Catalogue Pack size	user_field_6
030063	Acetylsalicylic Acid 100mg tabs		V	100	

ANTI-HYPERTENSIVE

Code	Description	Item Category 2	VEN	Catalogue Pack size	user_field_6
031661	Captopril scored 25mg tabs			250	52

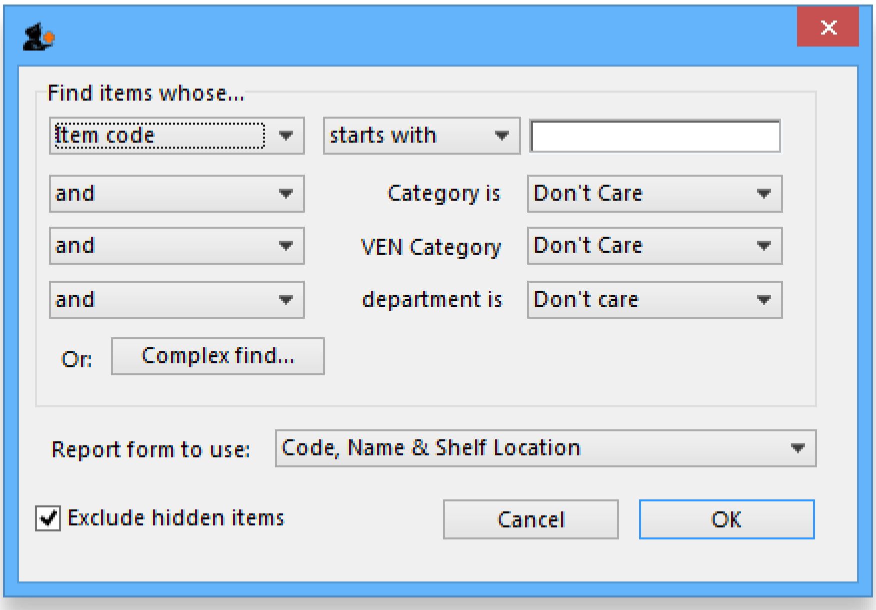
General

Local / remote report

This option will only show “local data” as an option unless you purchase a web services enabled version of mSupply, in which case you can view reports from remote locations running mSupply. Contact us for more information.

Items out of stock

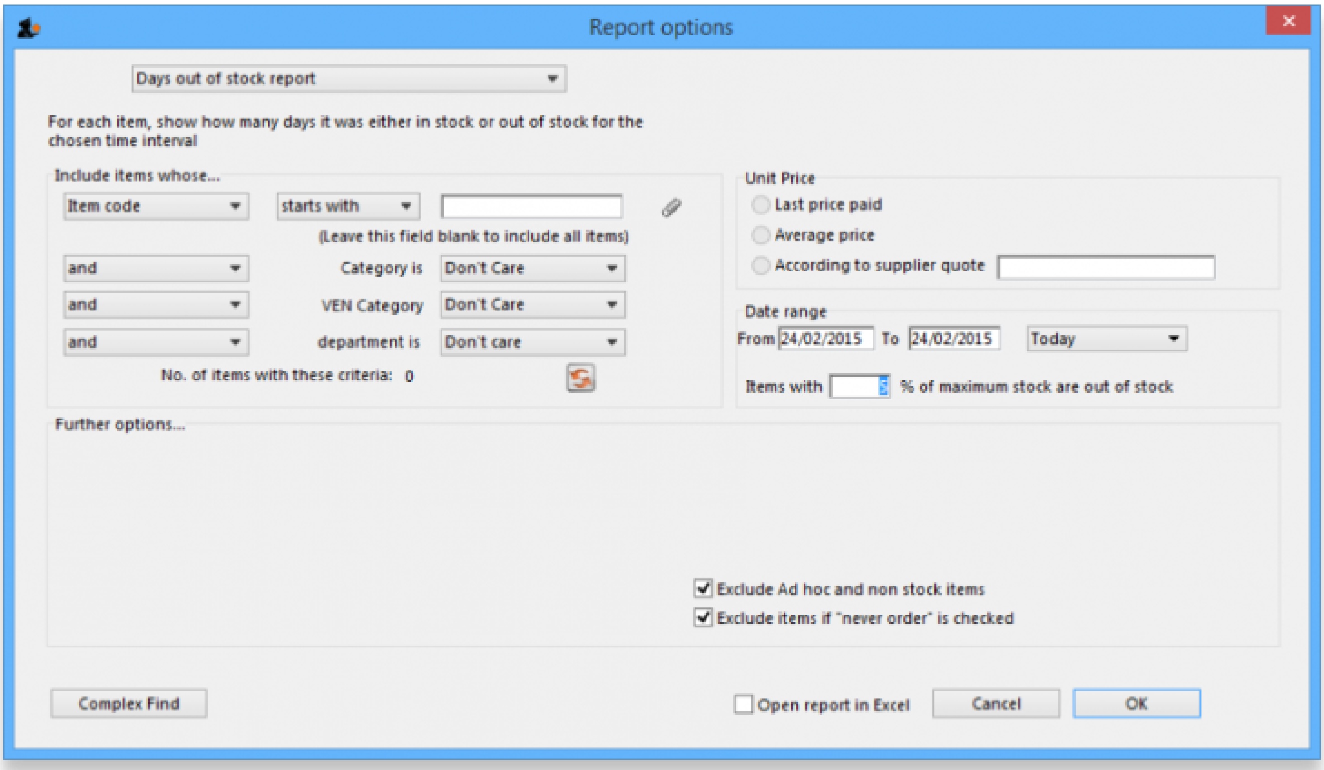
Selecting this report displays this window:



Specify your required options from the drop down lists;

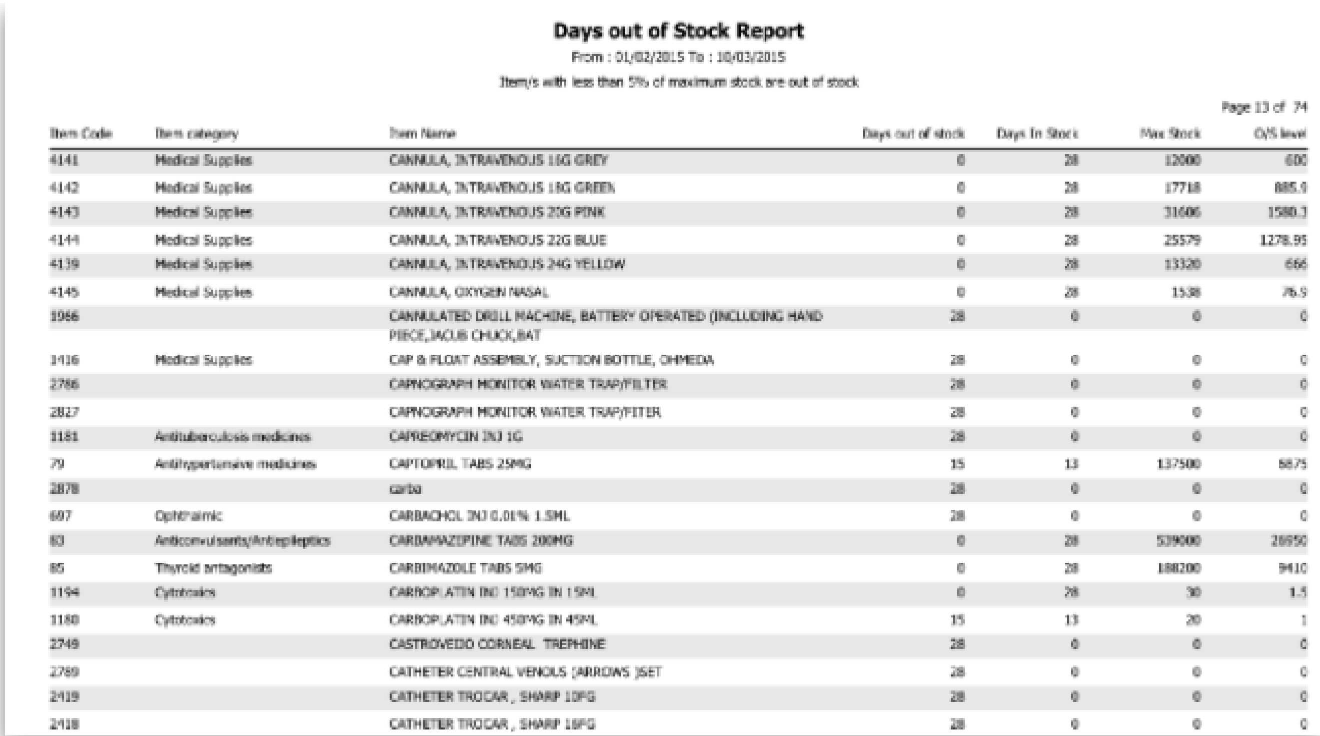
Days out of stock

Selecting this report displays this window:



Specify your required options from the drop down lists; the desired period may be identified either by entering dates in the *From* and *To* fields, or by using the drop down list to the right.

Clicking ok will generate a report like the one below:



Days out of Stock Report

From : 01/02/2015 To : 10/03/2015

Item/s with less than 5% of maximum stock are out of stock

Page 13 of 74

Item Code	Item category	Item Name	Days out of stock	Days In Stock	Max Stock	O/S level
4141	Medical Supplies	CANNULA, INTRAVENOUS 16G GREY	0	28	12000	600
4142	Medical Supplies	CANNULA, INTRAVENOUS 18G GREEN	0	28	17718	885.9
4143	Medical Supplies	CANNULA, INTRAVENOUS 20G PINK	0	28	31606	1580.3
4144	Medical Supplies	CANNULA, INTRAVENOUS 22G BLUE	0	28	25579	1278.95
4139	Medical Supplies	CANNULA, INTRAVENOUS 24G YELLOW	0	28	13320	666
4145	Medical Supplies	CANNULA, OXYGEN NASAL	0	28	1538	76.9
1966		CANNULATED DRILL MACHINE, BATTERY OPERATED (INCLUDING HAND PIECE,JACUB CHUCK,BAT	28	0	0	0
1416	Medical Supplies	CAP & FLOAT ASSEMBLY, SUCTION BOTTLE, OHMEDA	28	0	0	0
2786		CAPNOGRAPH MONITOR WATER TRAP/FILTER	28	0	0	0
2827		CAPNOGRAPH MONITOR WATER TRAP/FITER	28	0	0	0
1181	Antituberculosis medicines	CAPREOMYCIN INJ 1G	28	0	0	0
79	Antihypertensive medicines	CAPTOPRIL TABS 25MG	15	13	137500	6875
2878		carba	28	0	0	0
697	Ophthalmic	CARBACHOL INJ 0.01% 1.5ML	28	0	0	0
83	Anticonvulsants/Antiepileptics	CARBAMAZEPINE TABS 200MG	0	28	539000	26950
85	Thyroid antagonists	CARBIMAZOLE TABS 5MG	0	28	188200	9410
1194	Cytotoxics	CARBOPLATIN INJ 150MG IN 15ML	0	28	30	1.5
1180	Cytotoxics	CARBOPLATIN INJ 450MG IN 45ML	15	13	20	1
2749		CASTROVEDDO CORNEAL TREPHINE	28	0	0	0
2789		CATHETER CENTRAL VENOUS (ARROWS)SET	28	0	0	0
2419		CATHETER TROCAR , SHARP 10FG	28	0	0	0
2418		CATHETER TROCAR , SHARP 16FG	28	0	0	0

Clicking the **Complex find** button opens the Query Editor, allowing you to enter specific criteria relating to your search.

You may also specify what level in percentage terms of the maximum stock should be considered as being “out of stock..” Here's an example over 1 month:

Day of month	**1**	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**	**11**	**12**	**13**	**14**	**15**
stock on hand	20000	20000	20000	2000	1000	500	300	200	30000	25200	20200	18000	18000	18000	10000
Out of stock						🤦	🤦	🤦	This day had maximum stock. 5% of 30000=1500						
Note the 5% stock out level = 1500															

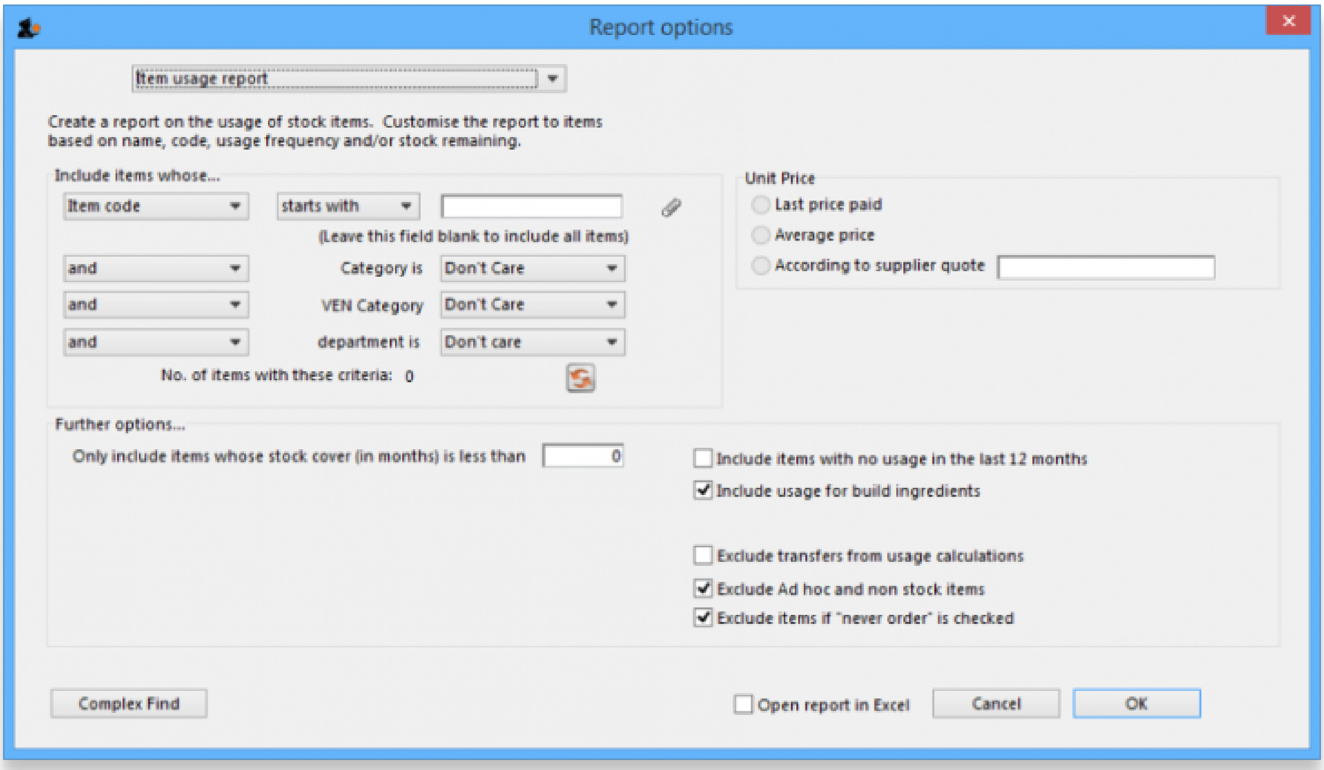
Day of month	**16**	**17**	**18**	**19**	**20**	**21**	**22**	**23**	**24**	**25**	**26**	**27**	**28**	**29**	**30**
stock on hand	5000	5000	2000	2000	800	800	20000	20000	20000	20000	20000	20000	20000	20000	20000
Out of stock					🤦	🤦									

Item usage

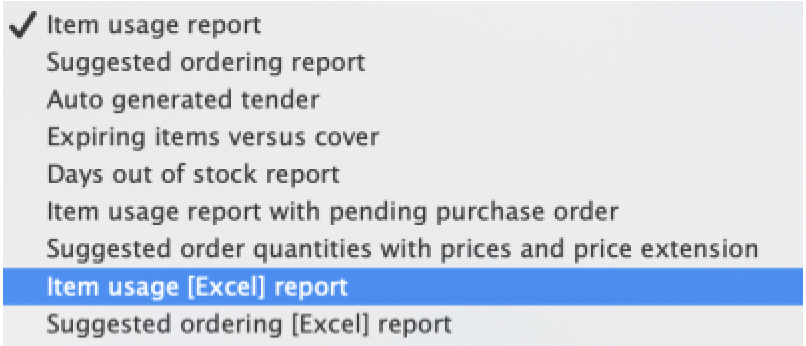
The Item usage report gives you a breakdown of item usage for the last few months, with summaries for the last 2 years, It also includes stock on hand and stock on backorder for each item in the report.

The report produced is very useful for forecasting or for seeing a list of items that need to be ordered.

When you choose the menu item you are shown a window like this:

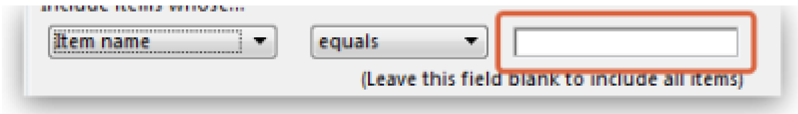


You can choose the type of report you want to run from the drop-down menu. Select the **Item usage [Excel] report** to create an Excel report.



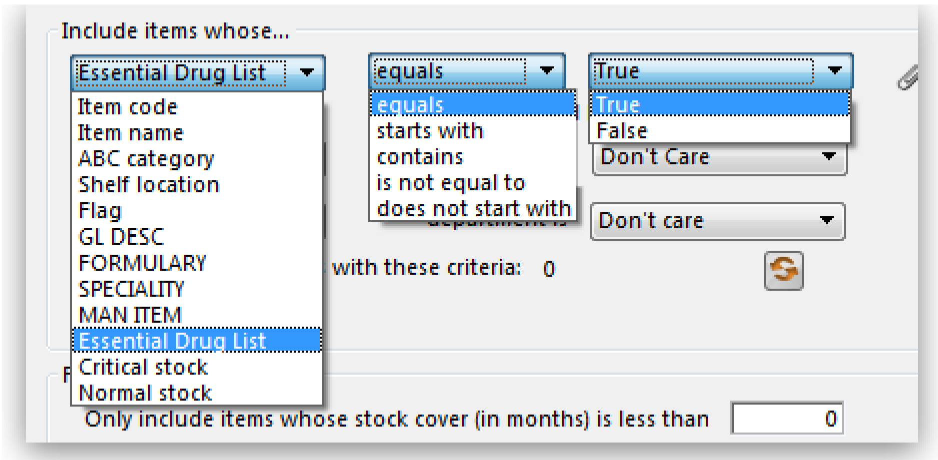
This menu also includes an item usage report, a suggested ordering amount report, or to auto generate a tender from the drop-down list at the top. This form is used for all 7 functions. (Note that the *Item usage report with pending purchase order* option will show you item usage with details of items currently on order and their expected date of delivery).

If you want to report on all items, leave the item name field blank:



otherwise enter an item name or code. For example, to report on amoxycillin stocks, you could enter “amox” into the field.

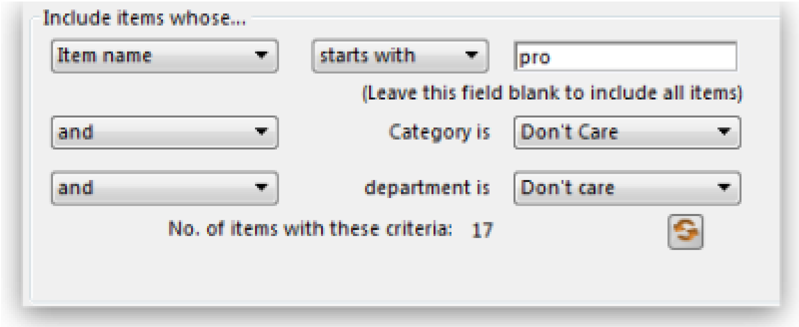
Depending on the entry in the first field, further options are available in the following two fields, but these will vary according to the entry in the first field. Among the options, he first field allows you to make your selection from the names given to custom item fields in the Preferences if this feature has been used.



If you wish to use shelf locations, then select the *shelf location* option and specify the desired shelf.

You can use the drop-down list to find Items with a particular code, or to use the values you have entered into one of the custom user fields. If this isn't powerful enough, use the *complex find* button to display the full query editor.

Click the refresh button  to calculate the number of items these basic parameters will find. This screenshot shows that 17 items meet the parameter specified, i.e. items whose names begin with '*pro*';



Only include items whose stock cover is less than...

If you want only to report on items whose stock is low, enter the threshold for days of stock on hand into the second field. For example, entering 90 into this field will only include items in the report whose stock is not sufficient to cover average usage for the next 90 days.

The default of `0` (zero) in this field will include *all* items with any amount of stock remaining.

Include items with no usage in the last 12 months

If this box is checked, items with no usage over the last year will be included. This will include items for which there are no transactions at all. This check box will have no effect if the previous “days cover” field is filled in, as an item with no usage will have “infinite” cover- any stock you do have is going to last you forever!

Include usage for build ingredients

If you manufacture items, you can choose whether the use of ingredient lines in manufacturing is included in the report or not.

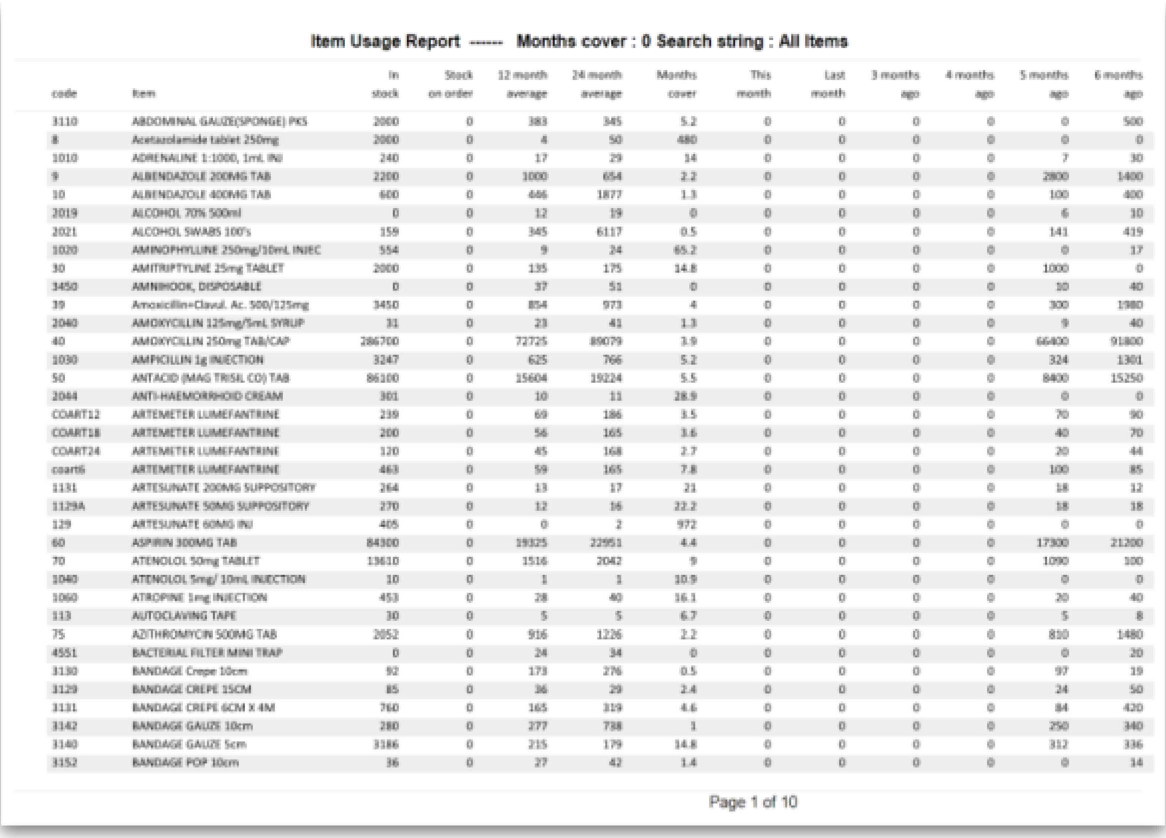
Open report in Excel

Checking this box opens the report in Excel (or any installed spreadsheet program).

Note: If you chose the **Item usage [Excel] report** from the dropdown list, the Excel box will already be checked.

If you want to save the report in Excel (or any installed spreadsheet program), choose File > Save as.

Item usage report preview



Item Usage Report ------ Months cover : 0 Search string : All Items

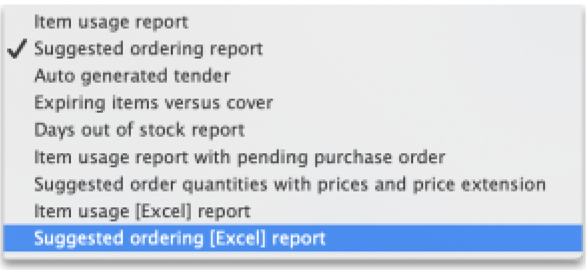
code	Item	In stock	Stock on order	12 month average	24 month average	Months cover	This month	Last month	3 months ago	4 months ago	5 months ago	6 months ago
3110	ABDOMINAL GAUZE(SPONGE) PKS	2000	0	383	345	5.2	0	0	0	0	0	500
8	Acetazolamide tablet 250mg	2000	0	4	50	480	0	0	0	0	0	0
1010	ADRENALINE 1:1000, 1mL INJ	240	0	17	29	14	0	0	0	0	7	30
9	ALBENDAZOLE 200MG TAB	2200	0	1000	654	2.2	0	0	0	0	2800	1400
10	ALBENDAZOLE 400MG TAB	600	0	446	1877	1.3	0	0	0	0	100	400
2019	ALCOHOL 70% 500ml	0	0	12	19	0	0	0	0	0	6	10
2021	ALCOHOL SWABS 100's	159	0	345	6117	0.5	0	0	0	0	141	419
1020	AMINOPHYLLINE 250mg/10mL INJEC	554	0	9	24	65.2	0	0	0	0	0	17
30	AMITRIPTYLINE 25mg TABLET	2000	0	135	175	14.8	0	0	0	0	1000	0
3450	AMNIHOOK, DISPOSABLE	0	0	37	51	0	0	0	0	0	10	40
39	Amoxicillin+Clavul. Ac. 500/125mg	3450	0	854	973	4	0	0	0	0	300	1980
2040	AMOXYCILLIN 125mg/5mL SYRUP	31	0	23	41	1.3	0	0	0	0	9	40
40	AMOXYCILLIN 250mg TAB/CAP	286700	0	72725	89079	3.9	0	0	0	0	66400	91800
1030	AMPICILLIN 1g INJECTION	3247	0	625	766	5.2	0	0	0	0	324	1301
50	ANTACID (MAG TRISIL CO) TAB	86100	0	15604	19224	5.5	0	0	0	0	8400	15250
2044	ANTI-HAEMORRHOID CREAM	301	0	10	11	28.9	0	0	0	0	0	0
COART12	ARTEMETER LUMEFANTRINE	239	0	69	186	3.5	0	0	0	0	70	90
COART18	ARTEMETER LUMEFANTRINE	200	0	56	165	3.6	0	0	0	0	40	70
COART24	ARTEMETER LUMEFANTRINE	120	0	45	168	2.7	0	0	0	0	20	44
coart6	ARTEMETER LUMEFANTRINE	463	0	59	165	7.8	0	0	0	0	100	85
1131	ARTESUNATE 200MG SUPPOSITORY	264	0	13	17	21	0	0	0	0	18	12
1129A	ARTESUNATE 50MG SUPPOSITORY	270	0	12	16	22.2	0	0	0	0	18	18
129	ARTESUNATE 60MG INJ	405	0	0	2	972	0	0	0	0	0	0
60	ASPIRIN 300MG TAB	84300	0	19325	22951	4.4	0	0	0	0	17300	21200
70	ATENOLOL 50mg TABLET	13610	0	1516	2042	9	0	0	0	0	1090	100
1040	ATENOLOL 5mg/ 10mL INJECTION	10	0	1	1	10.9	0	0	0	0	0	0
1060	ATROPINE 1mg INJECTION	453	0	28	40	16.1	0	0	0	0	20	40
113	AUTOCLAVING TAPE	30	0	5	5	6.7	0	0	0	0	5	8
75	AZITHROMYCIN 500MG TAB	2052	0	916	1226	2.2	0	0	0	0	810	1480
4551	BACTERIAL FILTER MINI TRAP	0	0	24	34	0	0	0	0	0	0	20
3130	BANDAGE Crepe 10cm	92	0	173	276	0.5	0	0	0	0	97	19
3129	BANDAGE CREPE 15CM	85	0	36	29	2.4	0	0	0	0	24	50
3131	BANDAGE CREPE 6CM X 4M	760	0	165	319	4.6	0	0	0	0	84	420
3142	BANDAGE GAUZE 10cm	280	0	277	738	1	0	0	0	0	250	340
3140	BANDAGE GAUZE 5cm	3186	0	215	179	14.8	0	0	0	0	312	336
3152	BANDAGE POP 10cm	36	0	27	42	1.4	0	0	0	0	0	14

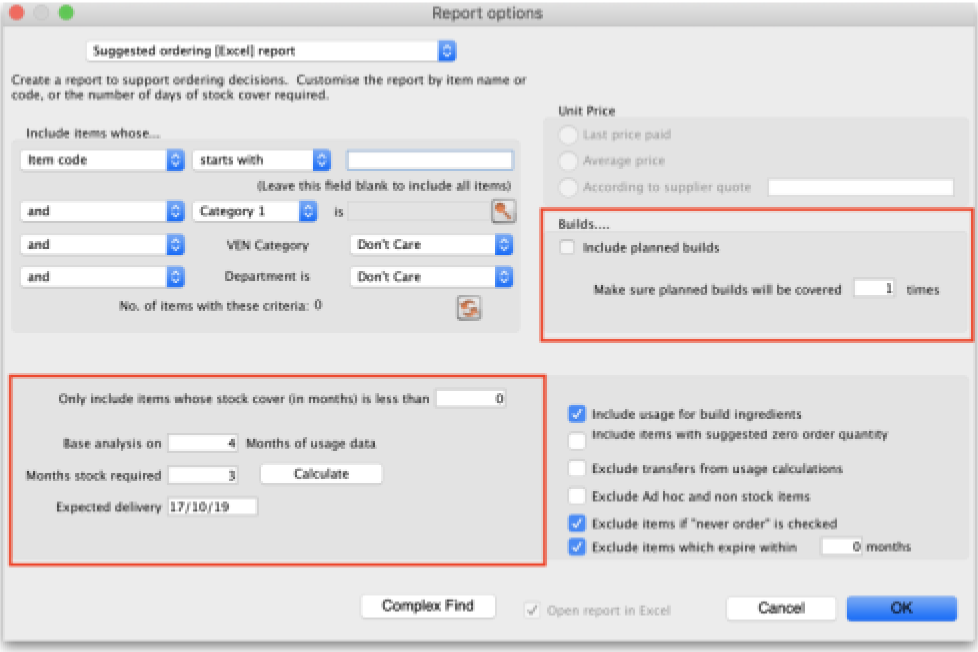
Page 1 of 10

Suggested ordering report

This report shows usage data, months cover of stock remaining and a suggested quantity to order for each item. The Purchaser can review this report to make a final decision on how much stock to order.

From the *Item usage report* dialogue box, select the **Suggested ordering report** option from the drop-down menu. Alternatively, select the **Suggested ordering [Excel] report** to create an Excel report:





Note the extra options for including item usage when calculating item ordering quantities. Also note the option to include ordering for build items. See item builds for more on built items.

Open report in Excel

Checking this box opens the report in Excel (or any installed spreadsheet program).

Note: If you chose the **Suggested ordering [Excel] report** from the dropdown list, the Excel box will already be checked.

If you want to save the report in Excel (or any installed spreadsheet program), choose File > Save as.

Suggested ordering report preview

	A	B	C	D	E	F	G	H	I	J	K	L	M	N
1	Suggested Ordering Report: Months cover : 24 months. Search string : amo. Based on last 12 months usage data.													
2														Page
3	Item Code	Item Name	VEN	Item category	Stock on hand	Backorder	12 months average	24 months average	Monthly usage for the last 12 months	Months Cover	Quantity on Order	Ordered quantity in use	Suggested order	Forecast used
4	Amosyr	Amoxycillin 125mg/5ml susp	V	06.2.1 Beta Lact	4120	0	3297	3673	3549	1.2	40012	40012	41052	N
5	Amo500	Amoxycillin 500mg cap	V	06.2.1 Beta Lact	129000	0	90300	92159	96633	1.3	600000	600000	1590200	N
6	Amclav	Amoxycillin+Clavulanate 500r	E	06.2.1 Beta Lact	21600	0	2482	2283	2607	8.3	30000	30000	10960	N

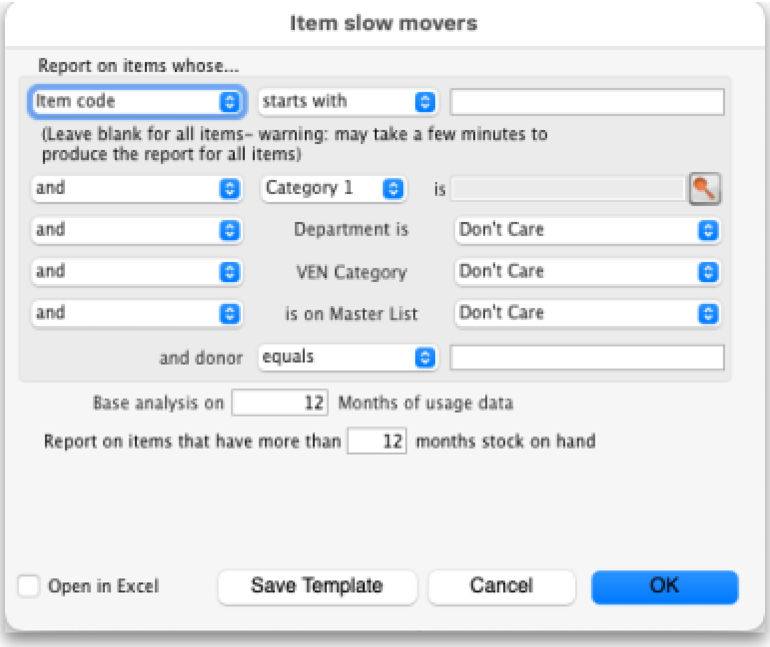
Item usage with outstanding purchase orders

The window that appears when you choose this report is the same as the previous one; with exactly the same options available; the report produced differs only in that any lines having outstanding Purchase Orders have the relevant details of the Purchase Order displayed.

Item slow movers

The Item slow movers report shows all items that have more than a specified number of months worth of stock. TIt is very useful for managing under-performing inventory and allows you to quickly to obtain a list of items where a reduction in stock might be desirable.

You will be shown a window to enter the report options:



Enter your search criteria in the top section.

Item name field

- If you want a report for all items, leave this field blank. Otherwise enter some text to reduce the report to just a few items (e.g. entering “am” will produce a report of just the items whose name starts with “am” (Amitriptylline, Amoxycillin, etc)

Category and department

- Use the drop down boxes as appropriate to select Category and/or Department if required.

Base analysis on X months of usage data

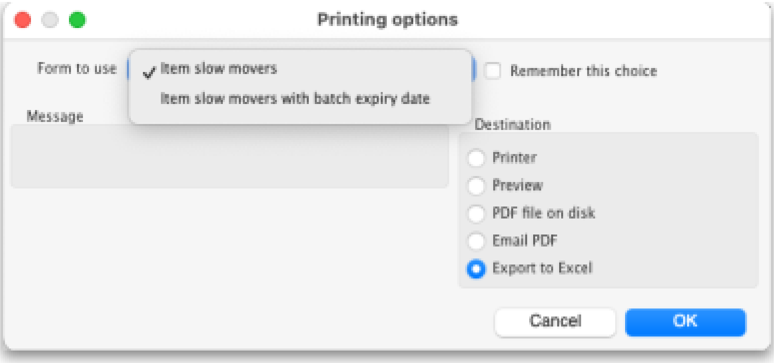
This is the number of months of usage data (working back in time from the current date) to use to calculate the AMC (Average Monthly Consumption). The months of stock on hand is then calculated as current stock/AMC.

Report on items that have more than X months stock on hand

Only items that have stock that will last this or a greater number of months will be included in the report. Those with less stock will not be included.

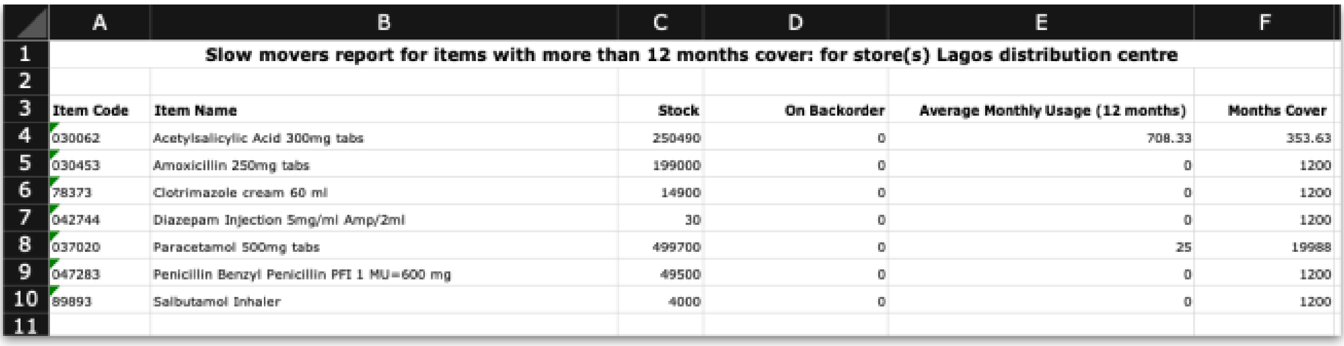
You can check the *Open report in Excel* checkbox to open the report in Excel, or any installed spreadsheet application.

When you click on the **OK** button you are taken to the printing options window:



There are two versions of this report, the standard one or one showing the individual batches of each item. Choose the one you want using the **Form to use** drop down list.

The standard report looks like this:



Slow movers report for items with more than 12 months cover: for store(s) Lagos distribution centre

Item Code	Item Name	Stock	On Backorder	Average Monthly Usage (12 months)	Months Cover
030062	Acetylsalicylic Acid 300mg tabs	250490	0	708.33	353.63
030453	Amoxicillin 250mg tabs	199000	0	0	1200
78373	Clotrimazole cream 60 ml	14900	0	0	1200
042744	Diazepam Injection 5mg/ml Amp/2ml	30	0	0	1200
037020	Paracetamol 500mg tabs	499700	0	25	19988
047283	Penicillin Benzyl Penicillin PFI 1 MU=600 mg	49500	0	0	1200
89893	Salbutamol Inhaler	4000	0	0	1200

The one with batches looks like this:

Slow movers report for items with more than 12 months cover: for store(s) Lagos distribution centre

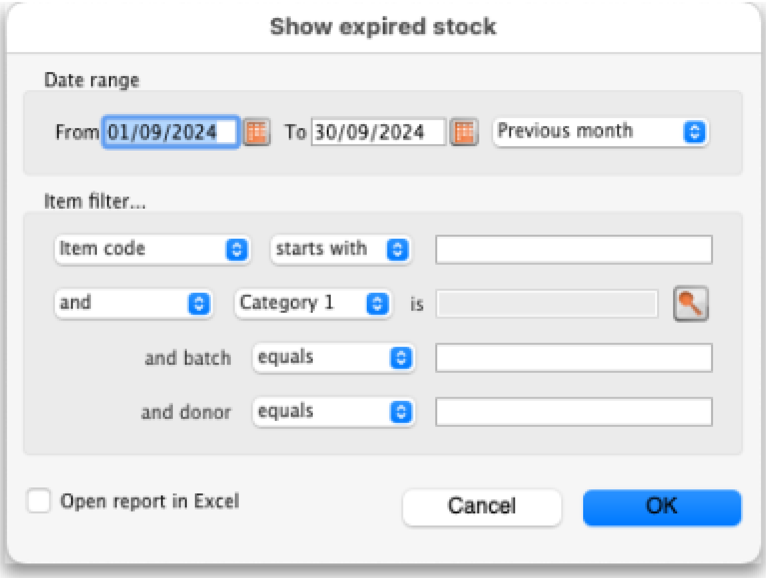
Item Code	Item Name	Stock	On Backorder	Average Monthly Usage (12 month	Months Cover
30062	Acetylsalicylic Acid 300mg tabs	250490	0	708.3333333	353.63
	Batches	**Stock**	**Expiry Date**		
	ABCD12345	245	30/06/2029		
	XCVB6789	490	30/11/2029		
	ABCD12345	5000	30/06/2029		
30453	Amoxicillin 250mg tabs	199000	0	0	1200
	Batches	**Stock**	**Expiry Date**		
	dfgfgh678	199	31/08/2029		
78373	Clotrimazole cream 60 ml	14900	0	0	1200
	Batches	**Stock**	**Expiry Date**		
	fghjmn8	1490	31/01/2028		
42744	Diazepam Injection 5mg/ml Amp/2ml	30	0	0	1200
	Batches	**Stock**	**Expiry Date**		
	hgjk89	30	31/08/2029		
37020	Paracetamol 500mg tabs	499700	0	25	19988
	Batches	**Stock**	**Expiry Date**		
	FGHJ7890	4997	31/07/2027		
47283	Penicillin Benzyl Penicillin PFI 1 MU=600 m	49500	0	0	1200
	Batches	**Stock**	**Expiry Date**		
	BNMJ789	750	20/06/2030		
	6789	240	30/09/2031		
89893	Salbutamol Inhaler	4000	0	0	1200
	Batches	**Stock**	**Expiry Date**		
	QWER637	400	31/07/2028		

Please note that:

- The months of stock is calculated for all batches together, not for individual batches.
- The maximum months of stock shown is 1200 i.e. 100 years! This figure will be shown for all items that have no consumption as well as those for which you genuinely have that much stock.

Expired stock

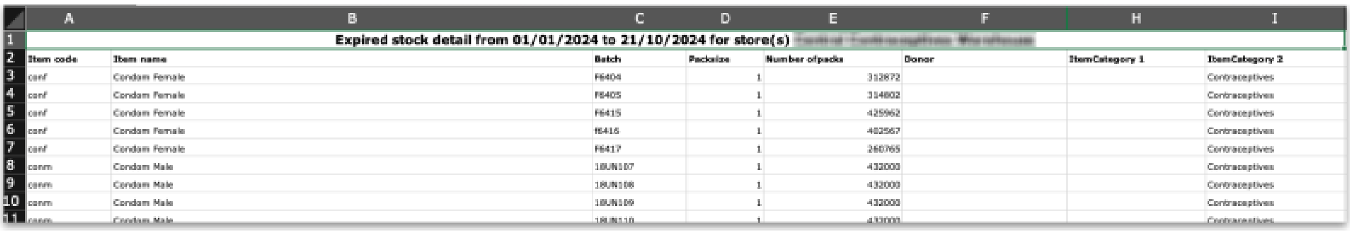
This is a customised report only available for few of our clients.



This report shows the stock that expired while it was on your shelves between the dates you seec in the options. It includes current stock that expired between the dates selected and also stock on confirmed customer invoices and inventory adjustment-reduces that was expired when it was put on those transactions (so if you removed stock from the store after it had expired, that is also included as stock that expired on the shelf).

Donor and custom stock fields are included as filter options if they are turned on in the current store.

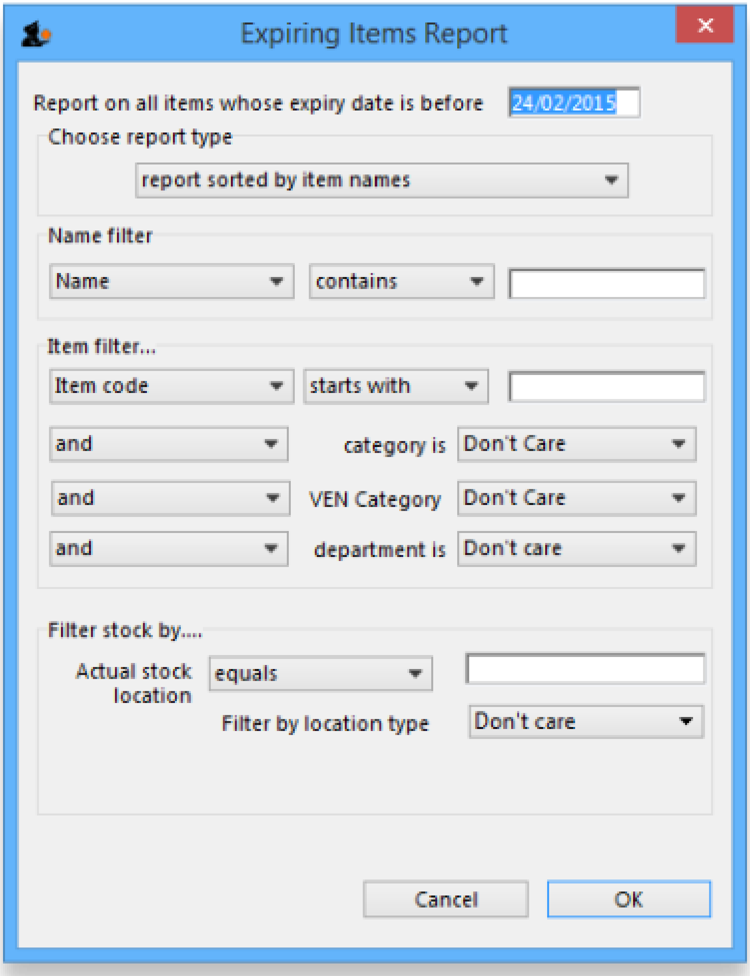
The report looks like this when exported to Excel:



Expired stock detail from 01/01/2024 to 21/10/2024 for store(s)

Item code	Item name	Batch	Packsize	Number ofpacks	Donor	ItemCategory 1	ItemCategory 2
conf	Condom Female	F6404	1	312872			Contraceptives
conf	Condom Female	F6405	1	314802			Contraceptives
conf	Condom Female	F6415	1	425962			Contraceptives
conf	Condom Female	f6416	1	402567			Contraceptives
conf	Condom Female	F6417	1	260765			Contraceptives
conm	Condom Male	18UN107	1	432000			Contraceptives
conm	Condom Male	18UN108	1	432000			Contraceptives
conm	Condom Male	18UN109	1	432000			Contraceptives
conm	Condom Male	18UN110	1	432000			Contraceptives

Expiring items



This report will ask you to enter a date, and will then give a report of all item lines in stock whose expiry date is before the date you have entered.

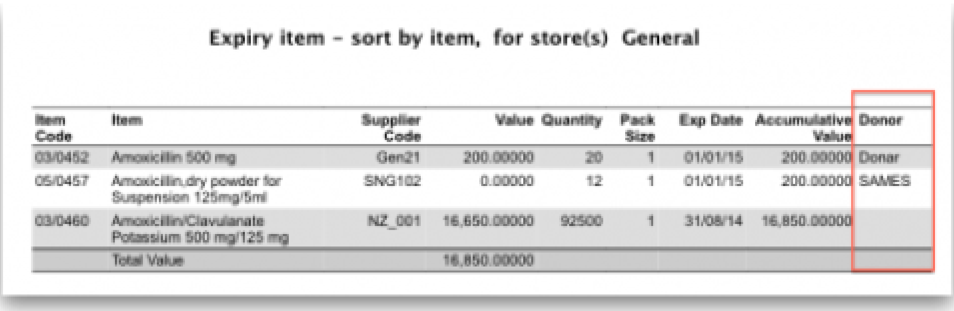
For example, entering 31/8/11 will display all items with expiry dates before 31st August 2011 (Enter the date in short format in the way your computer is set to handle dates (DD/MM/YY or MM/DD/YY or YY/MM/DD).

You can additionally filter the stock by the location type or the actual location in the warehouse. This is helpful for reporting on items in certain sections of your warehouse.

Three report type options are offered; select as appropriate. You may refine the search by using the *Name filter* and/or the *Item filter..*

Donor reporting

mSupply provides the feature of printing the Donor name on the Expiring Items report so that the organisation donating the goods can be identified and tracked. This can help with disposing of or returning goods to the Donor.

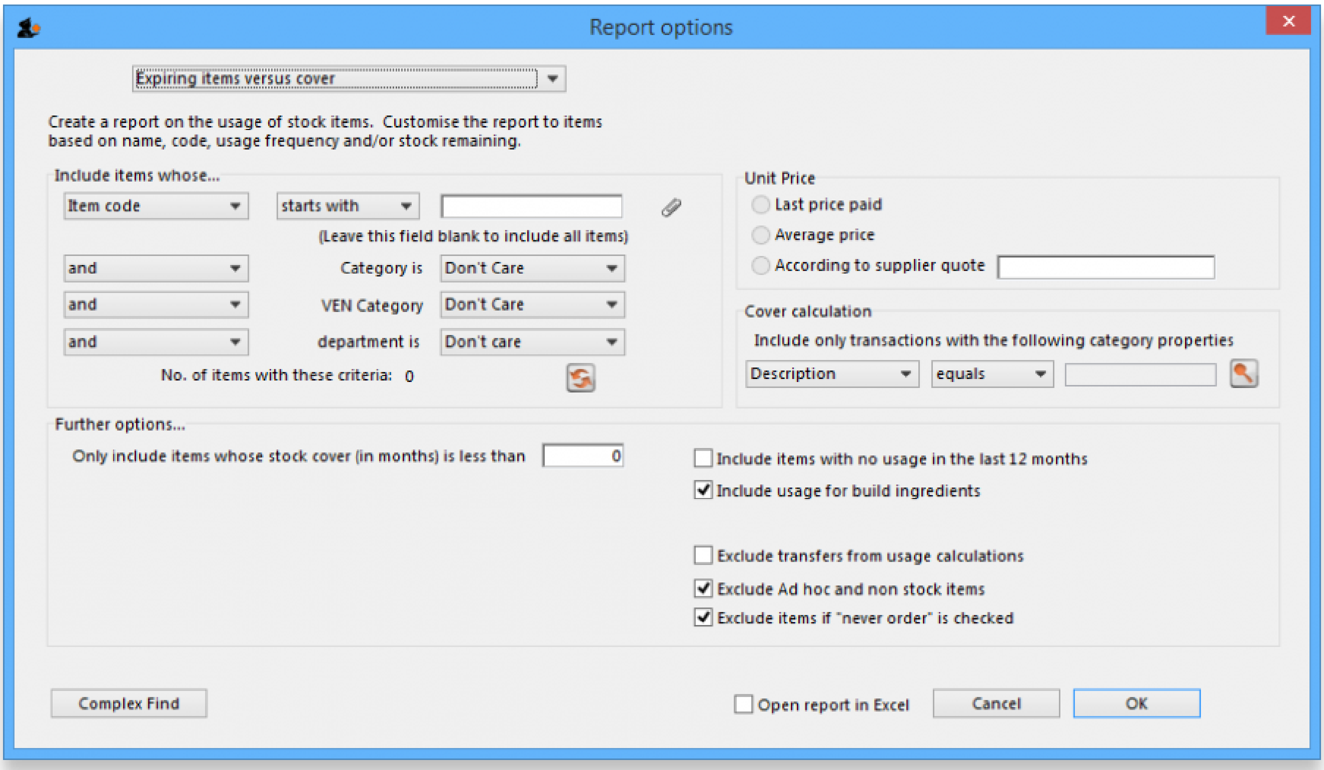


Expiry item - sort by item, for store(s) General

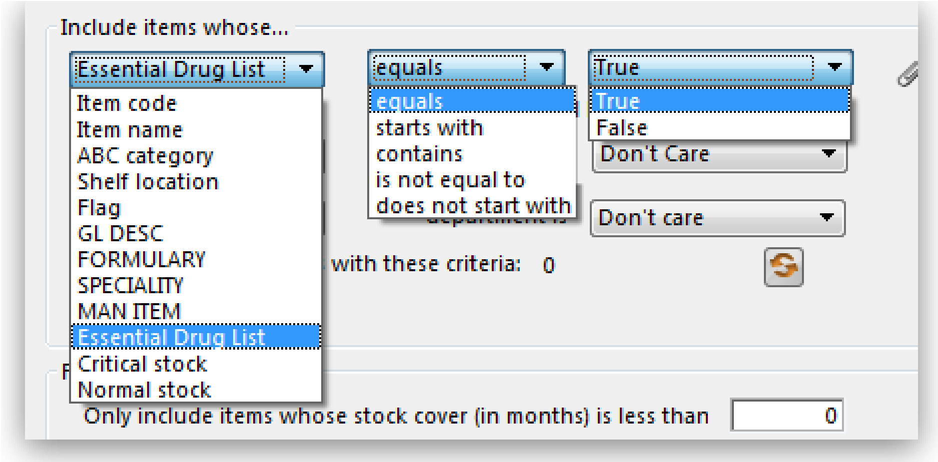
Item Code	Item	Supplier Code	Value	Quantity	Pack Size	Exp Date	Accumulative Value	Donor
03/0452	Amoxicillin 500 mg	Gen21	200.00000	20	1	01/01/15	200.00000	Donar
05/0457	Amoxicillin,dry powder for Suspension 125mg/5ml	SNG102	0.00000	12	1	01/01/15	200.00000	SAMES
03/0460	Amoxicillin/Clavulanate Potassium 500 mg/125 mg	NZ_001	16,650.00000	92500	1	31/08/14	16,850.00000	
	Total Value		16,850.00000					

Expiring items vs. cover

The Expiring items vs. cover report shows the number of months of cover for items you have in your store. The cover calculation uses the last 12 months of usage data to calculate the AMC which is used to determine months of cover.



Many filters may be applied in the drop down lists, which are the same as described under *Item usage…* above.



Note that If the field you are searching is a boolean field, e.g.Essential Drug List, "false" appears as the default entry, which you may change to "true".

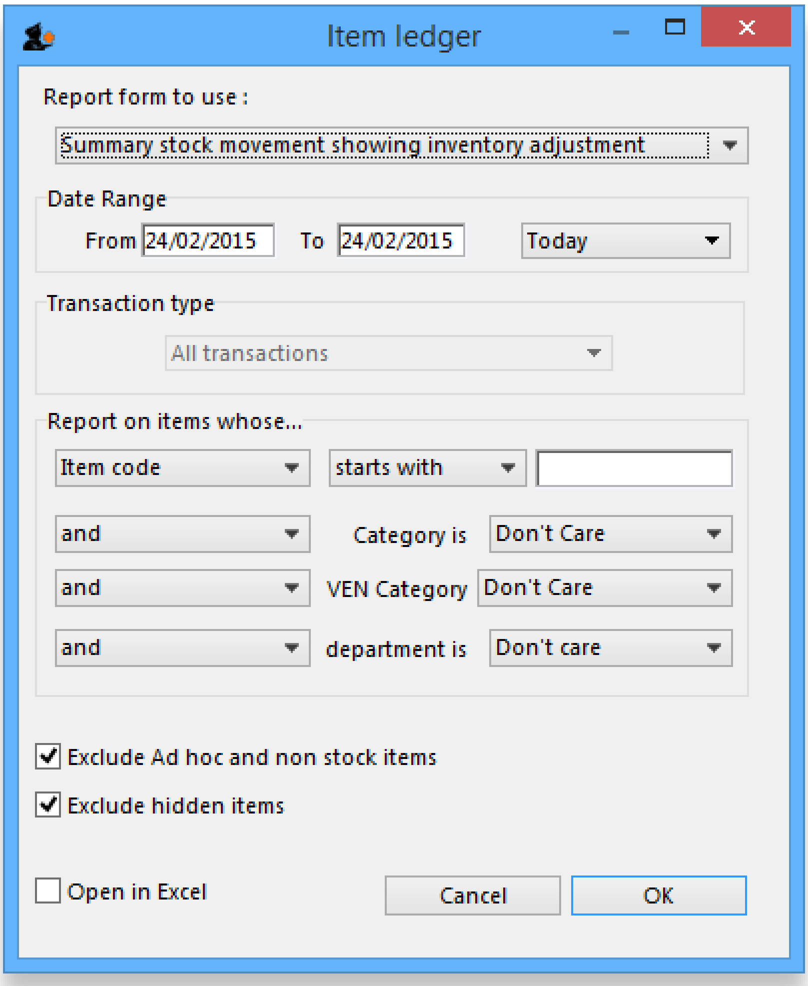
Cover calculation

This allows the user to include or exclude specific categories to be used in calculating coverage. Clicking the magnifying glass to the right lists categories to be chosen.

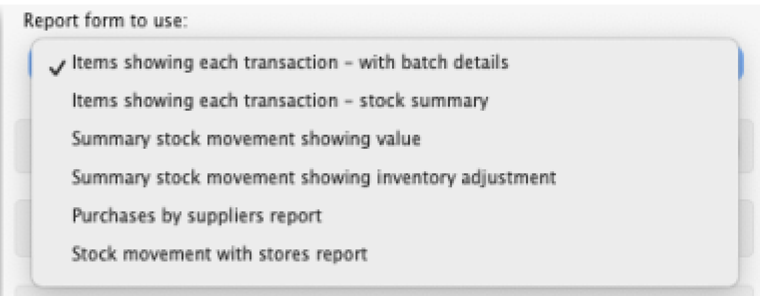
If you wish mSupply to remember the criteria which you have entered, click on the paperclip icon, and your selections will appear the next time you open the report.

Once you have selected your required criteria, click on the *Refresh* icon to show the number of items which match your criteria, and which will, therefore, feature in the report.

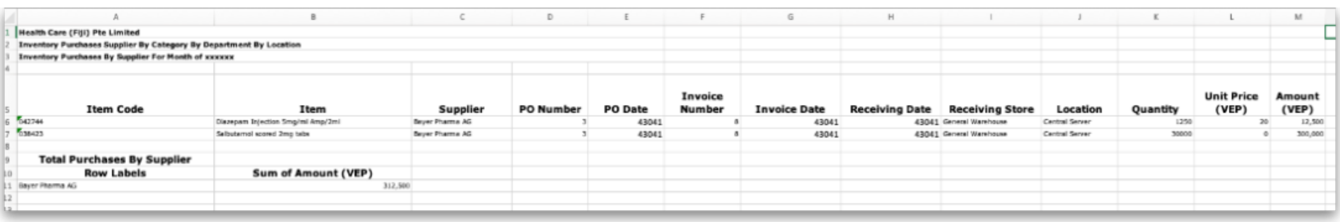
Item ledger



Ledger entries may be viewed in this report; different formats of report are available in addition to several filter options from the drop down lists, so the report may be designed to meet your specific requirements.



The *Purchases by suppliers* report relates stock received to purchase orders made and looks like this:



Health Care (FIJI) Pte Limited
Inventory Purchases Supplier By Category By Department By Location
Inventory Purchases By Supplier For Month of xxxxxx

Item Code	Item	Supplier	PO Number	PO Date	Invoice Number	Invoice Date	Receiving Date	Receiving Store	Location	Quantity	Unit Price (VEP)	Amount (VEP)
042744	Diazepam Injection 5mg/ml Amp/2ml	Bayer Pharma AG	3	43041	8	43041	43041	General Warehouse	Central Server	1250	20	12,500
038423	Salbutamol scored 2mg tabs	Bayer Pharma AG	3	43041	8	43041	43041	General Warehouse	Central Server	30000	0	300,000

Total Purchases By Supplier

Row Labels	Sum of Amount (VEP)
Bayer Pharma AG	312,500

The *Stock movement with stores* report looks like this:

General Warehouse
Stock movement - showing receiving and issuing store
Stock movement from: 01/01/2023 To: 31/12/2023

								Quantity					Stock Value				
Transaction Date	Item Code	Item	Issuing	Receiving	Location	Invoice	Batch	Opening Stock	Pack Size	Purchases	Usage	Closing Stock	Opening Stock	Unit Price	Purchases	Usage	Closing Stock
23-Jan-23	needsyr	Needles & Syringes	Central contraceptives warehouse	Inventory adjustments	Central Server	373	20230222	1700020	1	0	3000	1697020	14450170	8.5	0	25500	14424670
24-Jan-23	nori200i	Noristerat 200mg Inj	UNFPA	Central contraceptives warehouse	Central Server	273	KTOCBL6	251326	1	250700	0	502026	289024.9	1.15	288305	0	577329.9
30-Jan-23	exlut	Exluton	UNFPA	Central contraceptives warehouse	Central Server	287	W015774	161010	1	15936	0	176946	90165.6	0.56	8924.16	0	99089.76
30-Jan-23	exlut	Exluton	UNFPA	Central contraceptives warehouse	Central Server	287	W031992	176946	1	183693	0	360639	99089.76	0.56	102868.08	0	201957.84
31-Jan-23	iucd	Intrauterine Contraceptive Device (IUCD)	UNFPA	Central contraceptives warehouse	Central Server	279	DAV2752	18454	1	100150	0	118604	7935.22	0.43	43064.5	0	50999.72
31-Jan-23	iucd	Intrauterine Contraceptive Device (IUCD)	UNFPA	Central contraceptives warehouse	Central Server	279	DAV2753	118604	1	100434	0	219038	50999.72	0.43	43186.62	0	94186.34
31-Jan-23	iucd	Intrauterine Contraceptive Device (IUCD)	UNFPA	Central contraceptives warehouse	Central Server	279	DAV2754	219038	1	10200	0	229238	94186.34	0.43	4386	0	98572.34
07-Feb-23	conf	Condom Female	UNFPA	Central contraceptives warehouse	Central Server	290	F6779	2685	1	299821	0	302506	1342.5	0.5	149910.5	0	151253
							Totals	2648083		960934	3000	3606017	15082914		640645	25500	15698059

Previous: **13.01. Report basics** | | Next: **13.03. Transaction reports**

13.10. ATC and DDD code based reports

ATCs and DDDs

"ATC" stands for "Anatomical, Therapeutic, Chemical", and is a method of classifying chemical entities, and identifying them by category.

"DDD" stands for "Defined Daily Dose", and provides a means of comparing the utilisation of different drugs in a meaningful way. - e.g. if a dispensary has issued 10,000 x doxycycline 100mg and 20,000 x amoxycillin 250mg, a greater number of amoxycillin capsules has been used; but according to the DDD method, a greater number of patients have received doxyxcycline.

Thanks to the help of the WHO Collaborating Centre on Drug Statistics and Methodology, we are able to offer a starting drugs file with their codes; we have plans (not yet implemented) to maintain on our website an up-to-date list of ATC and DDD codes for essential drugs.

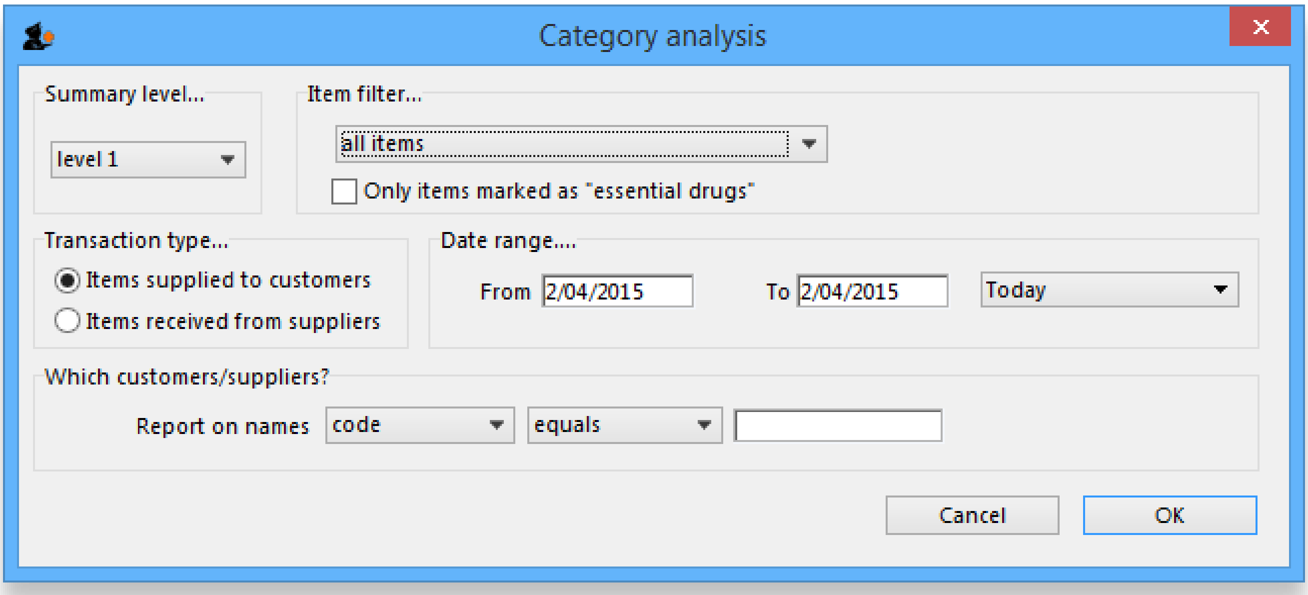
Reports using ATC and DDD codes

mSupply is designed for the ATC code to be entered in the *Category* field for each item, and is then able to report on supply transactions, giving a breakdown according to the different levels of the ATC code.

The *DDD Factor* field is intended to store the item's number of dose units in its DDD; for example, if an item's DDD is 1,000mg, and the supply is made using 250mg units, the DDD factor is 4. When designing a report, the total quantity of this item used should be divided by the DDD factor to obtain the number of DDDs supplied.

Should you wish to store an item's DDD value (1,000mg in the above example), it is suggested that you record it in one of the available *user fields.* The DDD value should not be recorded in mSupply's *DDD factor* field

The category analysis report is designed to be used in conjunction with the "category" field and the "DDD factor" field for each item.



When you produce a report, only some simple criteria are entered in the form. It is a simple matter to create reports giving, for example:

- A level one ATC summary for all items supplied to a specific hospital during a 12 month period
- A level two ATC summary for all items in ATC category “J” supplied to customers who are coded as “h” (for hospital) for a particular month.
- A level three ATC summary for all essential drugs supplied to all customers for a particular quarter.

The report provides you with the number of DDDs supplied for each category at the level requested, presuming you have “DDD factor” values entered correctly. Only the totals for each category are shown (not each individual transaction). The report may be printed, or exported for use in another application.

Let's run through the different options in the window… summary level…- enter the summary level. The category field is then evaluated based on the ATC coding system. Note that the code is “broken down” as follows

level	position
1	character 1 (A-Z)
2	characters 2 & 3 (01-99)
3	character 4 (A-Z)
4	character 5 (A-Z)
5	characters 6 & 7 (01-99)

So, for example the code for “caffeine” is N06BC01. “N” is the level 1 code, “06” the level 2 code, “B” the level three code, “C” the level four code, and “01” the level 5 code.

Note that if you choose “level 3”, you will also be shown the summary values for “level 1” and “level 2” as well.

Which type of item?

You can report on all items, or you can report on just a certain category. For example, you can enter “J” here to report only on items whose ATC code starts with “J”. Note that you need to set the summary level to “level 2” or your report will only report the total for category “J” without any further breakdown of data.

Only report on essential drugs

Check this if you only want to analyze items whose *essential drug check box is checked.*

Transaction type?

- Normally we will be interested in supply to customers. However, we might also be interested in “what percentage of purchases from IDA (a supplier) are aniti-infectives?”, in which case we would click on the “items received from suppliers”

Date range…

Enter a starting date and an ending date. Only transactions whose confirm date was within the range will be analyzed. The default range is the last 90 days. Note that the dates you enter are included in the range (that is the “from” date is “on or after” and the “to” date is “on or before”)

Which customers/suppliers…

Leave this value blank to report for all customers. Otherwise, choose “code” or “category” from the popup menu, and the appropriate comparison from the second popup menu. For example, if you want to report on a certain group of hospitals, you could enter those hospitals as having a category “h”, and then report on “names whose category starts with 'h'”

Previous: ***13.09. Customer ordered shortfall report*** | | *Next:* ***13.11. Other reports***

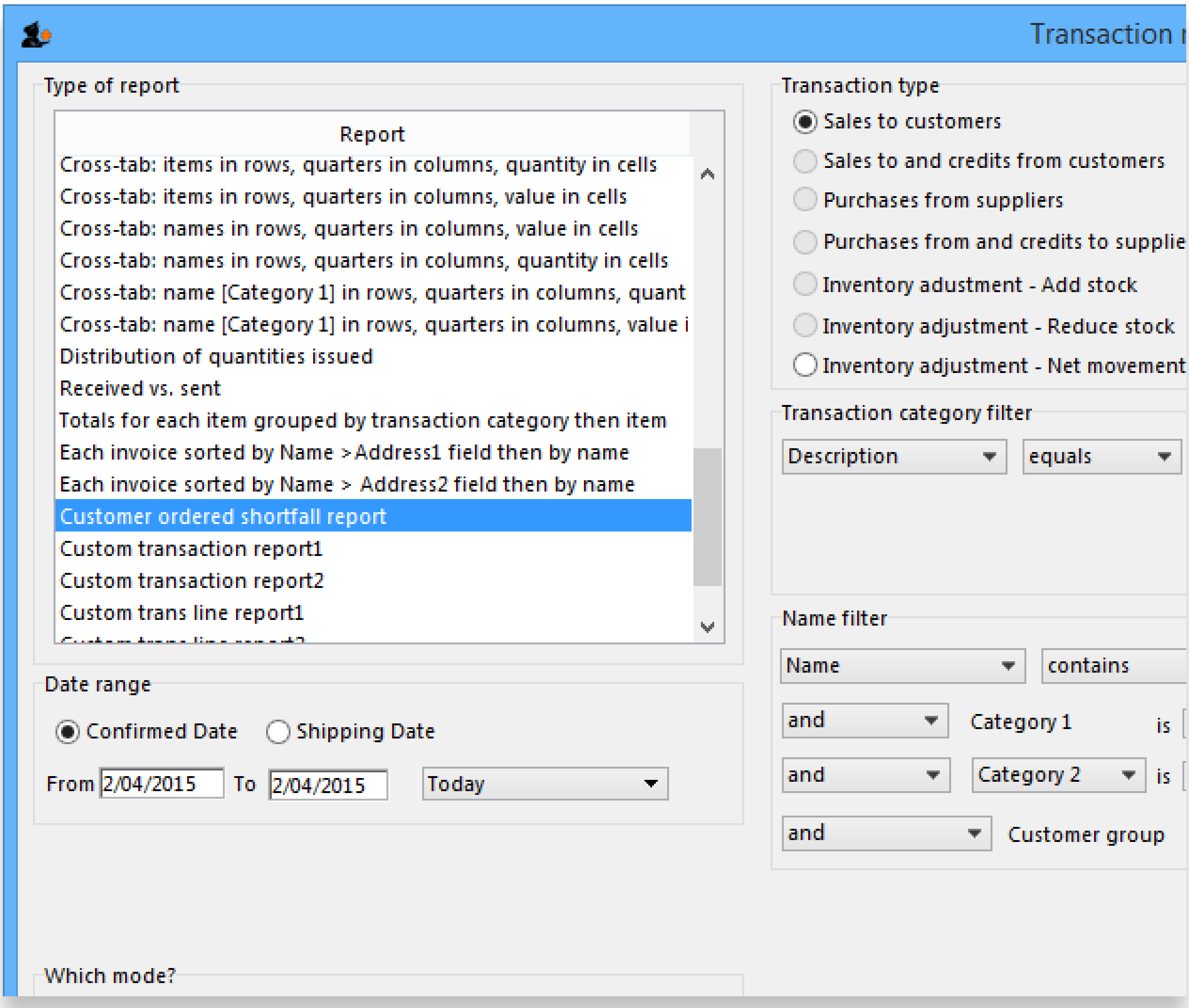
13.09. Customer ordered shortfall report

When you choose *Report> transactions* and then select *Customer ordered short fall report* , the transaction report like the one below will be produced. This report is used only for sales to customers.

For this report to make sense, make sure that:

- The *Allow placeholder lines on customer invoices* preference is **checked**

- The *Delete placeholder lines when confirming invoices* preference is **un-checked**



From the report window, select the desired parameters and click *OK* . An example report is shown below.

Customer ordered short fall report
National Medical Store

Date range :01/01/2007 to 17/01/2007, Item name contains @ma@Item category includes PHARMACEUTICALS

Transaction Type equals customer, Name code contains @2@, Mode: Both

Item Code	Item Description	Units of Demand	Units of supply	Shortfall	% shortfall
	Item category : MEDICAL SUPPLIES				
4455	MASK,RESUSCITATION,ADULT	586.02	43.02	543	92.66
4450	MASK,OXYGEN,ADULT,W/O TUBING	2838	1984	854	30.09
	Totals for item category:MEDICAL SUPPLIES	3424.02	2027.02	1397	40.8
	item category : PHARMACEUTICALS				
502	MAGNESIUM TRISIL CO. TAB PKT/20	5628	3895	1733	30.79
10	ACETAZOLAMIDE TABS 250MG BOT/100	1889	1639	250	13.23
	Totals for item category: PHARMACEUTICALS	7517	5534	1983	26.38
	Grand total :	10941.02	7561.02	3380	30.89

Previous: ATC based reports Next: Purchasing

Setting up mSupply to use the customer ordered shortfall report

For this report to be used, you need to do the following

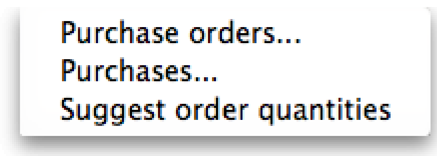
- Choose *File > Preferences > Invoices2* and ensure “Delete placeholder lines when confirming invoices” is **not** checked.
- Staff must enter requested amounts on invoices as placeholder lines.
    - For example, a customer orders 1000 x Paracetamol syrup 60ml. You have 800 in stock, so you add 800 to the invoice, and you also add a placeholder line for 200 bottles.

> You need to decide whether to (and if yes, how to) use the backorder system. If customers can rely on you to record shortfalls as backorders, then they will no need to re-order the shortfall in subsequent ordering cycles, as they know you will deliver it when available.
>
> In our experience, general custom and practice in places that use mSupply is for facilities to simply re-order stock that wasn't delivered 'last' time. In this context, it would not be useful to turn the backorder system on.

Previous: ***13.08. Dashboard*** | | Next: ***13.10. ATC and DDD code based reports***

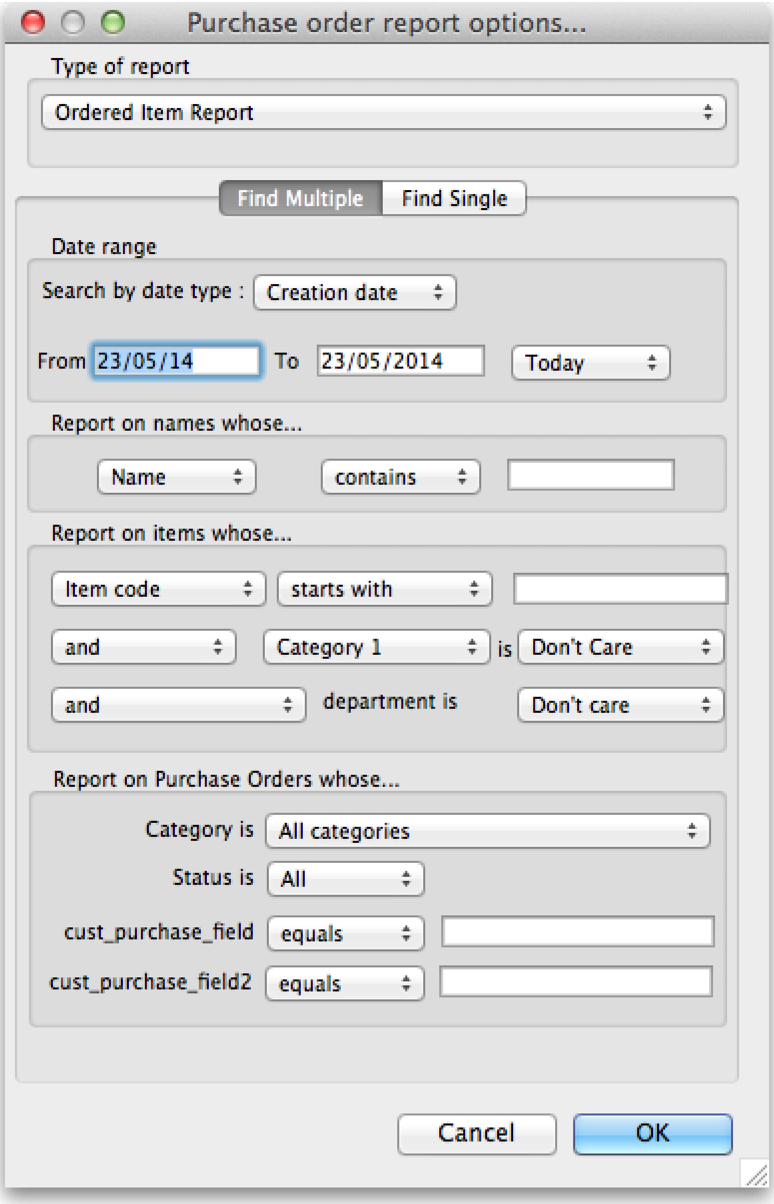
13.04. Purchasing reports

Purchasing reports (focused on what you have ordered and what you have received and what you want to order) are available at *Report > Purchasing*. The following report types are available:



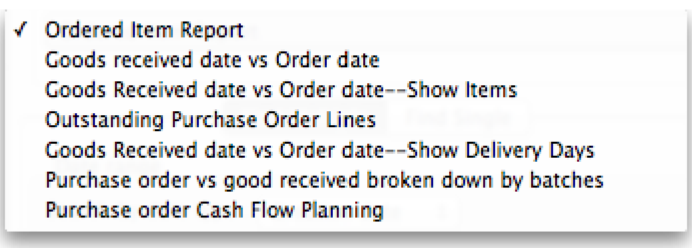
The first 2 options contain several different reports (see below). Select the required report type by clicking on it.

Purchase orders



Types of report

There are seven reports currently available:



- The *Ordered Item Report* will list items that are on Purchase Orders according to criteria specified.
- The *Goods Received date vs Order date* report lists each Goods Receipt for a particular Purchase Order and the number of lines received, then follows with details of the number of lines and date of the original Purchase Order, as in the example below. This is useful for tracking supplier delivery performance.

Ordered Item vs.Goods Received Report Creation date : 30/04/2007 to 30/05/2007

Name	Order no.	Status	Date ordered	Lines in PO	Date inv. rec'd	Date goods rec'd	# lines
					30/05/07	22/05/2007	8
					30/05/07	30/05/2007	2
Bronze Age supplies	16	cn	25/04/07	8			10

Note that the number of lines received may not match the number ordered as a single Purchase Order line may be supplied in split deliveries, as in example shown, or an ordered line may not be supplied at all.

- The *Goods Received date vs Order date - Show items* report.
- The *Outstanding Purchase Order Lines* report, which will display all Purchase Order lines for Purchase Orders provided that
  (1.) delivery is incomplete, and
  (2.) the Purchase Order has a *Confirmed* (“cn”) status.
- Note that Purchase Orders whose status is *Finalised* (“fn”) will be ignored when producing this particular report.
- The *Goods Received date vs Order date - show Delivery days* report shows the number of days taken to deliver items.
- The *Purchase order vs goods received broken down by batches* report shows the dates particular batches were received.
- The *Purchase order cashflow planning* report shows you the values and times of expected deliveries so that you can plan when money needs to be available to pay for them.

Date range and date type

A date option, for selecting which items/purchase orders to include in the report must be selected; options are:

- creation date - the date purchase orders were created
- sent date - the date purchase orders were confirmed
- expected delivery - the expected date of delivery for items
- actual delivery - the actual date that items were delivered

The report will include items/purchase orders with the selected *type* of date falling between two specified dates entered in the *From* and *To* fields. The drop-down list on the right affords many quick-choose preset date range options such as “today”, “yesterday”, “this week”, “last week”, “this month” etc.

Report on names...

The report may be confined to suppliers meeting specific criteria by selecting one of several supplier properties (“Name”, “Name code”, “analysis”, “category”, “Price code” etc.) in the left dropdown list, “equals”, “starts with” or “contains” in the centre dropdown list and making an appropriate entry in the field on the right. If this field is left blank, the report will include purchase orders from all suppliers within the chosen date range.

Report on items...

Similarly the report may be confined to items meeting specific criteria; you choose an item's property to filter on in the left dropdown list followed by the comparator in the centre dropdown list and finally making an appropriate entry is made in the field on the right. Again, leaving this field blank will produce a report on all items within the chosen date range.

You can also report on items that have a certain category and/or department. By default these options are set to “Don't care”, which means the item categories and departments will be ignored.

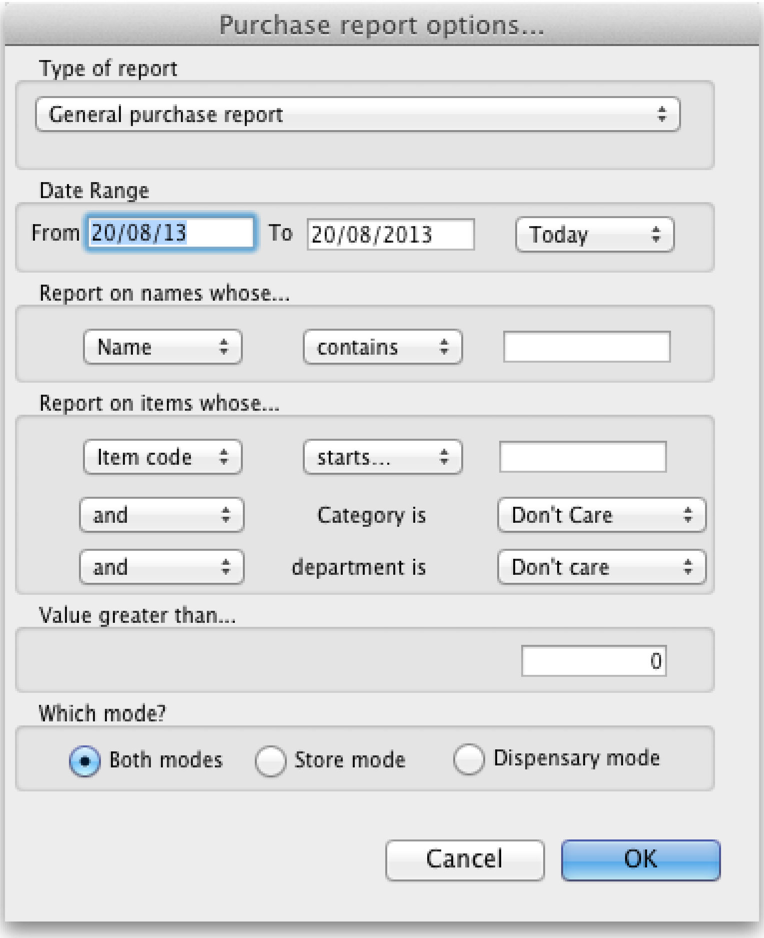
Note that only reports that report on *invoice lines* will produce meaningful results when you choose item criteria. Reports that report on whole transactions (e.g. “Each invoice grouped by name” or “Each invoice grouped by date”) will not produce meaningful data, as any one invoice can contain multiple items. Choose reports that report on invoice lines (e.g. “Each invoice line by item” or “Totals for each item grouped by month”) for these filters to have an effect.

Report on purchase orders...

In the same way, you can also filter your reports on properties of the purchase orders involved: category, status and both purchase order custom fields. For more information on purchase order categories see here.

Please note there is also a *Purchases by suppliers* report that relates stock received to purchase orders made. This is one of the item ledger type reports and details can be foiund on the 13.02. Stock and items reports page.

Purchases



This report finds all purchasing transactions over a certain value within a specified time period

You should enter:

- The date range of transactions on which to report
- Four filters are available to refine the report - a name filter, and three item filters; all are optionally and will be ignored if nothing is entered in the textbox or drop down lists are left at “Don't care”.
- The value of a transaction line above which the report will cover.

It may be good for your organisation to have a purchasing policy that stipulates that transactions over a certain value must be authorised by a second party (that is, someone other than the purchaser). This report allows you to monitor such a policy easily.

Suggested order quantities

Use this report for mSupply to analyse your current stock and, based upon a required number of months of stock cover which you enter, suggest how much of each stock item you should consider ordering.

There are currently 3 options for the suggested order quantities report: **Suggested ordering report**, **Suggested order quantities with prices and price extension** (see below for details on this report and its additional option) and **Suggested ordering [Excel] report**. They all have the same options as defined below but the last two will run much more quickly than the first one, even if the first one is exported to Excel. This is a temporary situation: the first option will be removed in a later version of mSupply and the last two will be the only options available.

Quantification

Some logic behind the calculations involved in this report is described in detail on the 6.01. Ordering stock from suppliers page.

As of version 7.15, mSupply supports a wide array of options for calculating forecast Average Monthly Consumption (AMC), which is then used to forecast needs and then to calculate a requested order quantity.

The options are:

Don't Adjust AMC

This has been the default in mSupply up until this point. The historic consumption is summed up for the number of months specified in the lookback field, and divided by the number of months. This works well if the item was fully stocked for the whole time. This method results in the forecast AMC being too low if stock was low or zero in the past.

Consumption vs **Distribution** vs **Issuance**: Stock may be consumed within the facility for the care of patients, or distributed to other facilities, but for the purposes of the supply chain, whatever a store issues out of stock is 'consumption', and these terms all have the same meaning. In mSupply, we use the term Consumption.

Adjust by % of days out of stock

This method takes each historic month's consumption, and adjusts it for the number of days in the month the item was out of stock. We multiply the consumption for the month by (Days in month divided by Days in stock) to get an *Adjusted* AMC Take this example for a single month where Item B had nil stock for a period of time:

- Item B was in stock for 10 days in the month
- Its historic consumption was 500
- The adjusted AMC is 500 x 31 / 10 = 1,550

Only consider fully stocked months

Here, we are attempting to address months with low stock by excluding them from our calculations, rather than adjusting their consumption. There is a field shown **% of days in stock to be considered fully stocked** that defaults to `90%`

For this method to work, you need to set the lookback period long enough that mSupply will be able to find enough fully stocked months to run the calculation. You can also include more low stock months by setting the **% of days in stock to be considered fully stocked** field to say) `50%`. Do this with caution, as there is a real danger that it will result in an underestimate of AMC.

mSupply's better algorithm

We've tried to come up with a better algorithm here by:

- ignoring months that are in stock for < 33% of days. That is, if the item was in stock for less than 10 days in the month, the consumption on those days is too erratic to draw conclusions about what the consumption for the whole month would have been.
- For months with stock >= 33% of days, Multiply the consumption for the month by √(Days in month/Days in stock) to get adjusted AMC. This adjusts the consumption up due to being out of stock, but by a factor up to 1.7 - so not as big an adjustment as the "Adjust by % of days out of stock" method.
- We also ignore months where the mean stock on hand is less than "% of typical AMC that stock level is considered compromised:" value you enter. This is a bit complicated, but here's an example:
    - Consider Item A - we have set the "when we calculate consumption there are 3 months that were "fully stocked" - those three months give us an AMC of 1500 per month.
    - Now, there's another month that was fully stocked (as in, on all 31 days in the month, there was *some* stock on hand.
    - But it turns out that the average stock on hand was only 50 - clearly they could never have had "normal" consumption, although they did have stock - if the cut-off is set to 100%, we're saying "ignore this month unless the average stock on hand was 1500 - in this case it's 50, so this month isn't used in the AMC calculations

We then sum the adjusted consumption for all the eligible months & divide by the number eligible months to get the best forecast AMC eva 😉

Here's a diagram:

graph TD A(Was the Month fully stocked?)-->|Yes|B(Use consumption from these months to calculate typical AMC) A-->|NO|C(Ignore these months) B-->D(Was there months having <10 days with stock)-->|Yes|E(Ignore these months) D-->|No|F(Increase consumption with adjusted AMC to account for days out of stock for these months) classDef OR fill:Orange class A,B,C,D,E,F OR

Let's take an example of how this is done:

Lets say we are using:

AMC Adjustment for out of stock: mSupply's better algorithm

% of days in stock to be considered fully stocked: 90

% of typical AMC that stock level is considered compromised: 100

Step 1: First we are adjusting by % days in stock to be considered fully stocked. This calculation will be used in Step 2 to calculate the typical AMC. So if this is set as 90%, only months with ≥90% stock will be considered. In this case, Nov 2023 (202311) and Oct 2023 (202310) are excluded as it is less than 90%.

Expiry Filter : Exclude stock that will expire within 3 months of projected consumption date, Months stock required : 6. Based on last 12 months usage data.																	
		Year & Month (YYYYMM)	202407	202406	202405	202404	202403	202402	202401	202312	202311	202310	202309	202308	202307		
Item code	Item name	Days in Month	26	30	31	30	31	29	31	31	30	31	30	31	5		
	Aspirin Soluble Tablets 300mg	Consumption	0	0	0	0	0	0	0	100	0	100	0	0	0		
		Days in Stock	26	30	31	30	31	29	31	31	3	11	0	0	0		
		Mean SoH	100	100	100	100	100	100	100	165	20	35	0	0	0		
Item code	Item Name	VEN	Item category	Stock on hand	Expiring stock	Effective SOH	Backorder	Stock on order	AMC 12 months	AMC 24 months	Monthly usage for the last 12 months	No. months considered for adjusted AMC	Adjusted AMC	Number of months in stock	Ordered quantity used	Suggested order	Forecast used
	Aspirin Soluble Tablets 300mg			100	0	100	0	0	17	13	16.66	8.8	30.3	3.3	0	100	N

Step 2: We then calculate the typical AMC which excludes the months Nov 2023 (202311) and Oct 2023 (202310) from step 1. To do this, we use: (Total consumption of only months included in Step 1)/(Number months usage basis) = 100 / 7.8 = 12.82. Red coloured boxes indicate exclusion. (Note: We have 7 full months, and 0.8 of a month due to July 2024 (202407) as 26 days is 0.8.

Expiry Filter : Exclude stock that will expire within 3 months of projected consumption date, Months stock required : 6. Based on last 12 months usage data.																	
		Year & Month (YYYYMM)	202407	202406	202405	202404	202403	202402	202401	202312	202311	202310	202309	202308	202307		
Item code	Item name	Days in Month	26	30	31	30	31	29	31	31	30	31	30	31	5		
	Aspirin Soluble Tablets 300mg	Consumption	0	0	0	0	0	0	0	100	0	100	0	0	0		
		Days in Stock	26	30	31	30	31	29	31	31	3	11	0	0	0		
		Mean SoH	100	100	100	100	100	100	100	165	20	35	0	0	0		
Item code	Item Name	VEN	Item category	Stock on hand	Expiring stock	Effective SOH	Backorder	Stock on order	AMC 12 months	AMC 24 months	Monthly usage for the last 12 months	No. months considered for adjusted AMC	Adjusted AMC	Number of months in stock	Ordered quantity used	Suggested order	Forecast used
	Aspirin Soluble Tablets 300mg			100	0	100	0	0	17	13	16.66	8.8	30.3	3.3	0	100	N

Step 3: Next there is an automatic exclusion for days of low stock ≥33% in the month. Note: This is automatic and is not set by the user. In the example, this is Nov 2023 (202311) as it is the only month with less than 33% days in stock in the month.

Step 4: Now we consider the criteria of "100% of typical AMC that stock level is considered compromised" which we entered in the Report options. Since this is set as 100% by us, we now take the typical AMC (12.82) and check the Mean SOH of each month to make sure that this is equal or higher than 12.82. If stock level is not higher than 12.82, that month will be excluded from the Adjusted AMC calculation (Step 5). Note: If we had selected 90% of typical AMC to be considered compromised, this means we will be looking at 90% stock or more of the typical AMC (12.82) and anything less than this will be excluded.

To now obtain the number of months to be considered for the adjusted AMC: We will exclude the 33% low stock month from Step 3. We will exclude any months with (x)% typical AMC stock level that is considered compromised (which in this case, there is none). We will be including the month with 11 days in stock however, as it is more than the 33% exclusion step and the first step where it was excluded was just for calculating what months to use for typical AMC.

From the example, we will now have 8.8 months that we will be considering for the Adjusted AMC.

Expiry Filter : Exclude stock that will expire within 3 months of projected consumption date, Months stock required : 6. Based on last 12 months usage data.

		Year & Month (YYYYMM)	202407	202406	202405	202404	202403	202402	202401	202312	202311	202310	202309	202308	202307		
Item code	**Item name**	**Days in Month**	**26**	**30**	**31**	**30**	**31**	**29**	**31**	**31**	**30**	**31**	**30**	**31**	**5**		
	Aspirin Soluble Tablets 300mg	Consumption	0	0	0	0	0	0	0	100	0	100	0	0	0		
		Days in Stock	26	30	31	30	31	29	31	31	3	11	0	0	0		
		Mean SoH	100	100	100	100	100	100	100	165	20	35	0	0	0		

Item code	Item Name	VEN	Item category	Stock on hand	Expiring stock	Effective SOH	Backorder	Stock on order	AMC 12 months	AMC 24 months	Monthly usage for the last 12 months	No. months considered for adjusted AMC	Adjusted AMC	Number of months in stock	Ordered quantity used	Suggested order	Forecast used
	Aspirin Soluble Tablets 300mg			100	0	100	0	0	17	13	16.66	8.8	30.3	3.3	0	100	N

Step 5: We can now calculate the Adjusted AMC with the formula: Square root[(Days in month)/(Days in the stock)] * Consumption We check this individually for each month that has not been excluded. So, if the "Days in month" = "Days in Stock", the square root of this = 1. In Dec 2023 (202312) = 1 x 100 (consumption) = 100. In Oct 2023 (202310) = Squareroot(31/11) = 1.6787. Then 1.6787 x 100 (consumption) = 167.87.

Add these together: 100 + 167.87 = 267.87 total for all included months that we will use to calculate adjusted AMC.

Step 6: For the Adjusted AMC = 267.87/8.8 months = 30.34 units per month.

Steps Summarised:

Step 1: Adjusting by % Days in Stock

- Set threshold for fully stocked (e.g., 90%)
- Exclude months with < 90% stock

Step 2: Calculate Typical AMC

- Use months not excluded in Step 1
- Calculate Typical AMC = (Total consumption of only months included in Step 1)/(Number months usage basis)

Step 3: Automatic Exclusion for Low Stock

- Exclude months with < 33% days in stock

Step 4: Compromised Stock Level Check

- Set threshold (e.g., 100% of typical AMC)
- Exclude months below threshold

Step 5: Calculate Adjusted AMC

- Apply formula to each included month = Square root[(Days in month)/(Days in stock)] * Consumption
- Sum the results

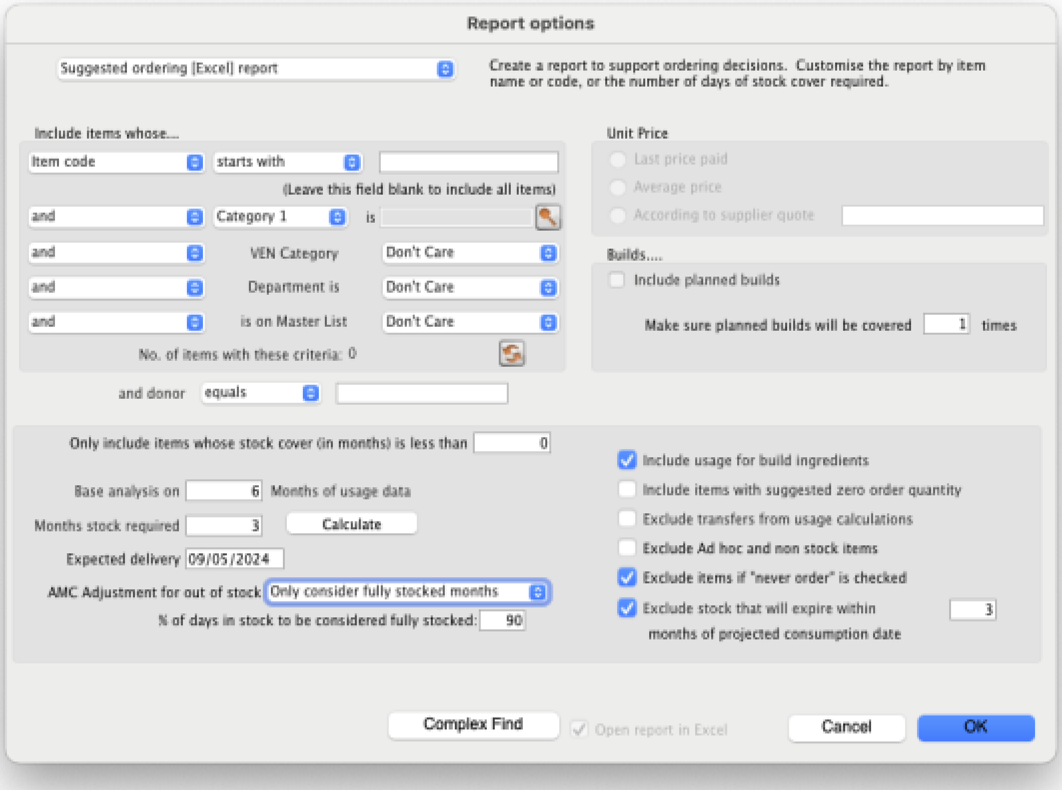
Step 6: Final Adjusted AMC Calculation

- Divide total consumption by number of months
- Calculate Adjusted AMC

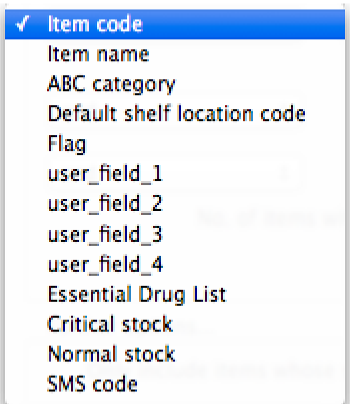
Note: If all months have been excluded due to the first or second exclusion criteria, then the typical AMC calculation will automatically be used instead.

Report options

You'll see this window:



If you want to report on all items, leave the item name field blank, otherwise enter an item name or code. For example, to report on amoxycillin stocks, you could enter “amox” into the field.



The drop down list, after the item name and code choices, lists several other fields, including any user defined fields, where the names that you have defined for custom item fields in the *Preferences* are displayed.

If you wish to use item categories, then use the *Item category* list to choose the one on which you want to report.

You can use the drop-down list to find Items with a particular code, or to use the values you have entered into one of the custom user fields. If this isn't powerful enough, use the *Complex Find* button to display the full query editor.

Click on the refresh button (double orange arrows) to show the number of items these basic parameters will find.

Only include items whose stock cover is less than…: If you want to report only on items whose stock is low, enter the threshold for days of stock on hand into the second field. For example, entering 90 into this field will only include items in the report whose stock is not sufficient to cover average usage for the next 90 days.

Enter “0” (zero) for this field to report on items with any amount of stock remaining.

Expected delivery: Enter an appropriate date that you expect the stock to arrive with you based on previous delivery times.

Include usage for build ingredients: If you manufacture items, you can choose whether the use of ingredient lines in manufacturing is included in the report or not.

Basis of analysis: Enter the number of months of data (form the current date) mSupply should use to calculate your consumption.

Exclude transfers from calculations: Check this box if you wish transfers within your organisation to be excluded from the calculations.

Include items with no usage in the last 12 months: If this box is checked, items which have not been used over the last year will be included. This check box will have no effect if the previous “days cover” field is filled in, as an item with no usage will have “infinite” cover- any stock you do have is going to last you forever

Months stock required: In this field, enter the number of months stock cover you want to have available. The report will automatically take into account any stock you already have, so all you need to do is enter how many months cover you want.

AMC Adjustment for Out of Stock: See the “Quantification” discussion above on the different options available.

Exclude stock that will expire within 3 months of projected consumption date a checkbox that allows you to accurately predict the amount of stock that is likely to be wasted due to expiry and current consumption rate. In this current example, mSupply will only aim to distribute stock if the expiry is more than 3 months away. This updated feature is only available in mSupply v7.12 or later.

This topic is huge so it may be worth reading this topic Stock wastage prediction for ordering

Open report in Excel: Checking this box opens Excel (or any other installed spreadsheet application) and displays the report as a spreadsheet. If you want to save the report, choose File > Save as… in your spreadsheet application.

Report output

A typical `Suggested Order` report will look something like below.

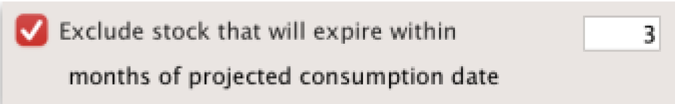
Suggested ordering [Excel] report: for store(s) Tamaki Central Medical Store, Exclude items if "never order" is checked

Expiry Filter : Exclude stock that will expire within 3 months of projected consumption date, Months stock required : 3. Based on last 6 months usage data.

Item code	Item Name	VEN	Item category	Stock on hand	Expiring stock	Effective SOH	Backorder	Stock on order	AMC 12 months	AMC 24 months	Monthly usage for the last 6 months	Number months considered for adjusted AMC	Adjusted AMC	Number of months in stock	Ordered quantity used	Suggested order	Forecast used
AR33197	ABACAVIR / LAMIVUDINE 60/30 MG CP			5	0	5	0	10	4	2	7.5	2.7	9.3	0.7	10	13	N
50457	Amoxicillin Dry Powder for Suspension 125mg/5ml Bot/100ml	V	ANTI-INFECTIVES	2,410	2,410	0	0	0	1	0	1.66	5.9	1.66	0	0	10	N

Definitions of each column after item properties:

- Stock on hand : Total quantity of stock currently available in your inventory
- Expiring stock : Calculated by (Total stock that is set to expire) - (Daily stock usage [which is derived from the AMC e.g., AMC / 30 days if 30 days in the month]). The amount of expiring stock to be accounted for is selected in the reports option:



- Effective SOH : Calculated by ('Stock on hand') - ('Expiring stock'). This is the usable stock available.
- Backorder : Quantity of stock that has been ordered by customers but not yet fulfilled due to insufficient stock.
- Stock on order : Quantity of stock that has been ordered from suppliers and is expected to arrive but not yet received.
- AMC 12 months : Average quantity of stock used per month over the last 12 months.
- AMC 24 months: Average quantity of stock used per month over the last 24 months.
- Monthly usage for the last (x) months : Calculated by ('Total consumption for the last (x) months of usage data') / ('(x) months of usage data'). This value is set by the user in the Report options:

- Number of months considered for adjusted AMC : After the AMC adjustment is made (and months with low stock has been excluded), this value indicates the number of months that have been included for calculating the adjusted AMC. This value is derived from whichever formula has been chosen in the “AMC Adjustment for out of stock”:

- Adjusted AMC : This adjusted value is based on the formula selected in the Report options:

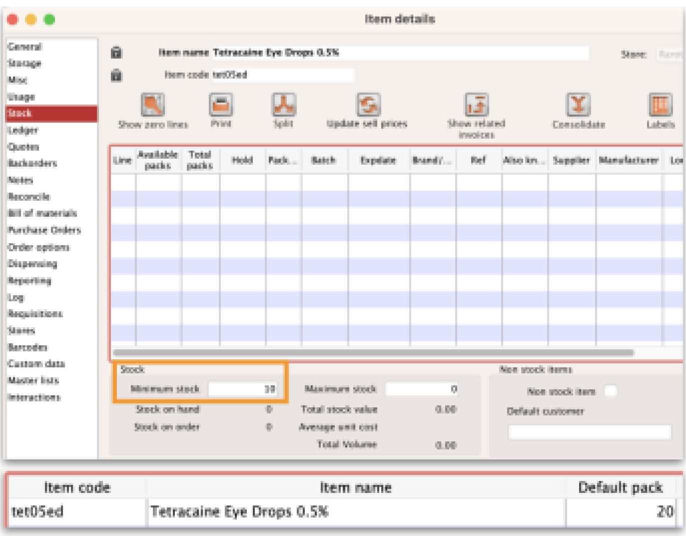
- Number of months in stock : Calculated by ('Effective SOH') / ('Adjusted AMC'). This gives the number of months the current stock will last based on adjusted consumption rates.
- Ordered Quantity used : This is how much of the stock you have ordered that you will actually need to use, based on how much you use each day and how much stock you already have (Note: forecast calculation will affect this). This is determined by:

- Calculate the "usage per day of stock" = AMC / 30.4375
- Multiply "usage per day of stock" with the "total number of days in your months stock required" to get "Total usage required" = Usage per day of stock x Total number of days in your months stock required
- Calculate your "Future stock on hand" = Stock on order + Effective SOH - Backorder
- Subtract "Total usage required" from "Future stock on hand" to get the "Net stock difference to be used" = Total usage required - Future stock on hand.
- This value ("Net stock difference to be used") now determines the "Ordered Quantity used".
  - If the value is a negative value and there is "Stock on order", add the "Net stock difference to be used" with "Stock on order" = "Net stock difference to be used" + "Stock on order"
  - If the value is a positive value and there is "Stock on order", if "Net stock difference to be used" is greater than "Stock on order", the "Ordered Quantity used" will be the same value as the "Stock on order" as all the stock on order will be used up.

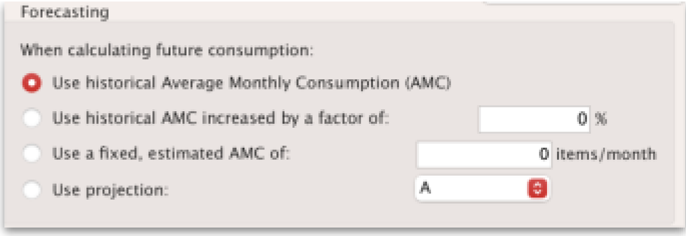
- Suggested Order calculated by:
  - If expected delivery date has not been adjusted: ('Months stock required' x 'Adjusted AMC') - ('Effective SOH' - 'Stock on order') + 'Backorder'.
  - If expected delivery date has been adjusted, this will be accounted for as it will only look at the stock required from date of expected delivery to the end of months stock required:

- Usage per day = Adjusted AMC/30.4375 (which is from 365.25/12 which is days in the full year)
- Suggested order quantity = Usage per day x Days needed (which is 'Expected delivery date' - End date of the 'Months stock required', or days needed in total - days of lead time) - ('Effective SOH' - 'Stock on order') + 'Backorder'

- This determines the quantity of stock that needs to be ordered to maintain the desired inventory levels after considering current stock, back orders, and stock already on order.
- Note: if you are using the "Minimum stock" function, the suggested order will also take this into account to ensure that there is enough stock to meet this value. This will be calculated by taking the minimum pack size to cover the minimum stock.
- Note: if you are using forecasting this can affect suggested order quantity. Please check forecasting settings on mSupply if it is indicated as being used in the spreadsheet.
- Note: The "maximum" quantity field is only a UI feature and does not have any other functionality apart from allowing users to see their recorded maximum quantity. Anything in this field will not be accounted for in the SOQ report.



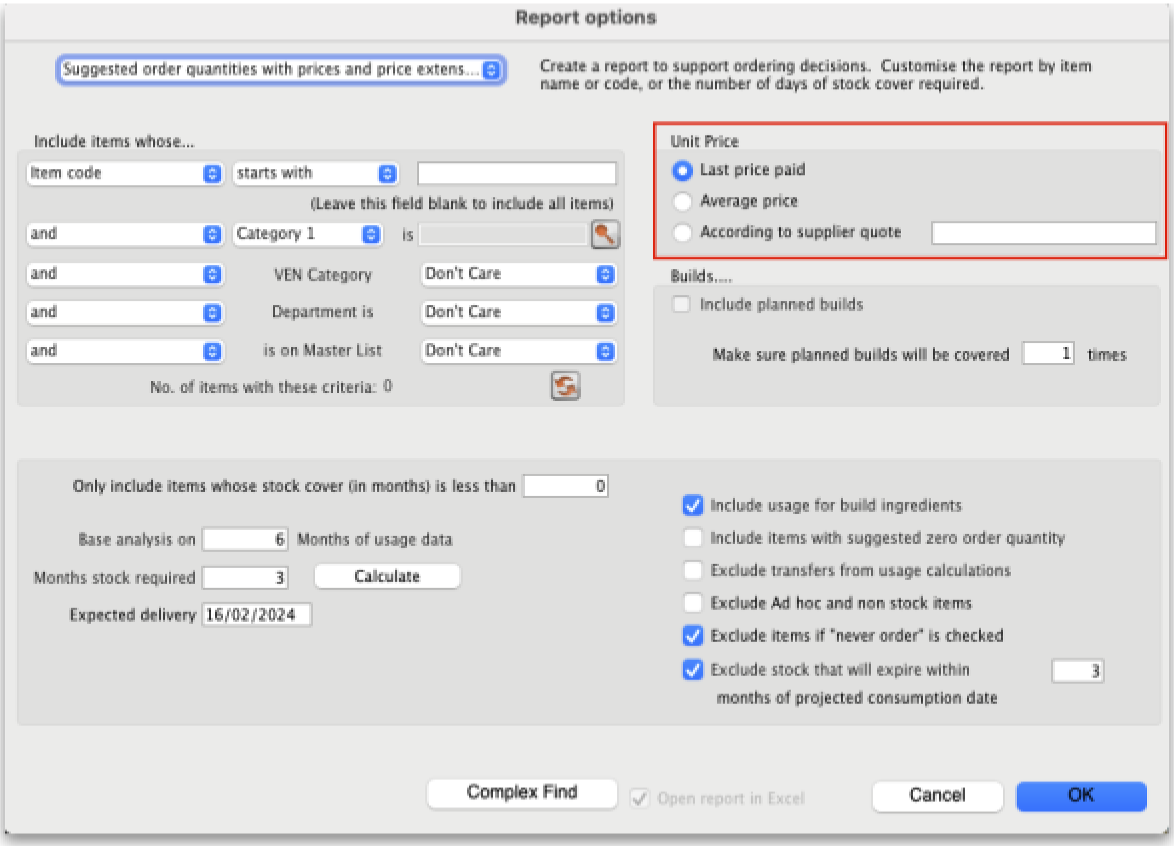
- Forecast used : Based on forecasting options under “Usage” in “Item details” if this has been used or not (yes / no):



For a more detail guide click on this topic : Stock wastage prediction for ordering.

Suggest order quantities with prices and price extension

This report is an extension of the previous one, allowing you to see what the suggested order will cost. The filter choices you have are the same as for the suggested order quantities report but you get an additional option to say how your suggested order will be priced:



Key Columns in the report output:

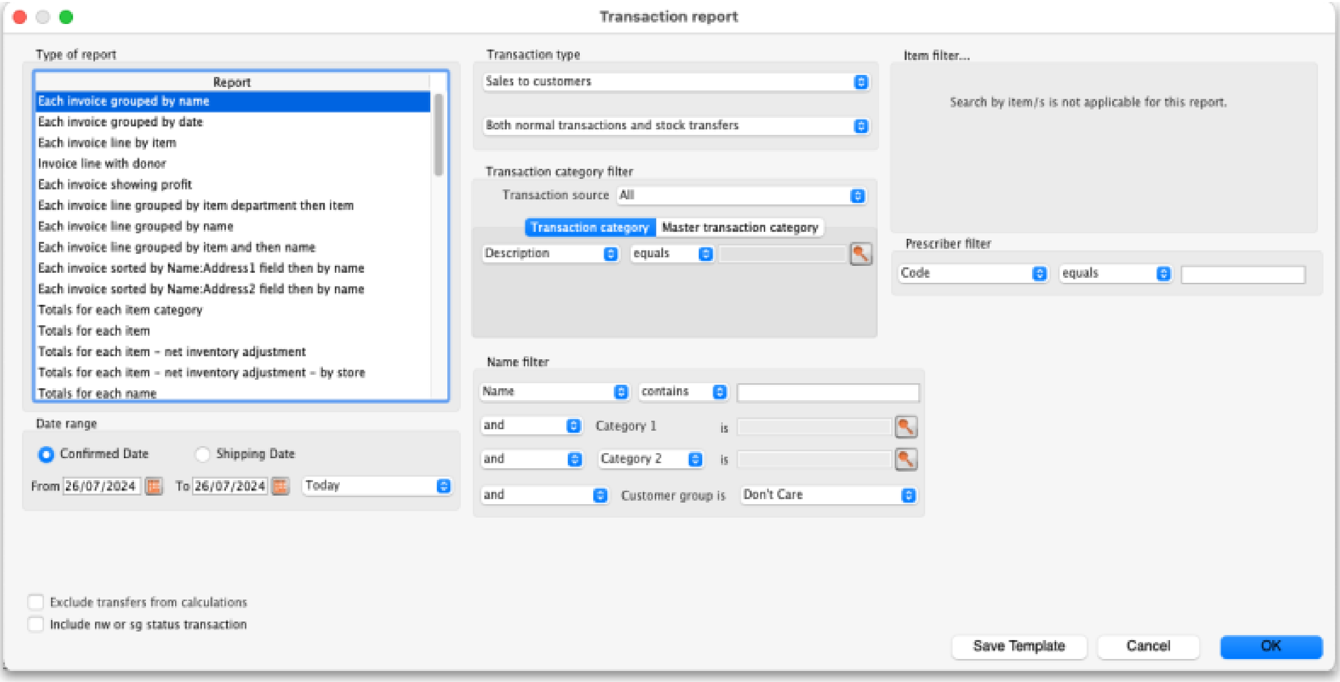
- *Unit Price*: Calculated via the latest price or by supplier quotes or using average prices received during the look back period. The `look back period` is the same setting that is used to calculate average monthly stock usages.
- *Price extension (Suggested)*: This is the predicted cost of a future order based on Unit Price.
- *Annual consumption (quantity)*: This is the predicted stock usage over a year based on the latest average monthly consumption.

- *Annual consumption (cost)*: Potential annual cost based on unit price.

Previous: ***13.03. Transaction reports*** *| | Next:* ***13.05. Stocktake reports***

13.03. Transaction reports

Transaction based reports are accessed by choosing the **Report > Transactions...** menu item or by clicking on the Transactions item in the Transactions section on the Reports tab of the Navigator:



All these reports (and there are many!) summarise supplier or customer transactions in many different formats. Many different filters have been incorporated, allowing filtering on transactions, names, prescribers, items, categories and departments. The filters that do not apply to different reports are hidden as required. Feel free to mix and match and experiment with the filters and different reports to see the different views of information that you can get.

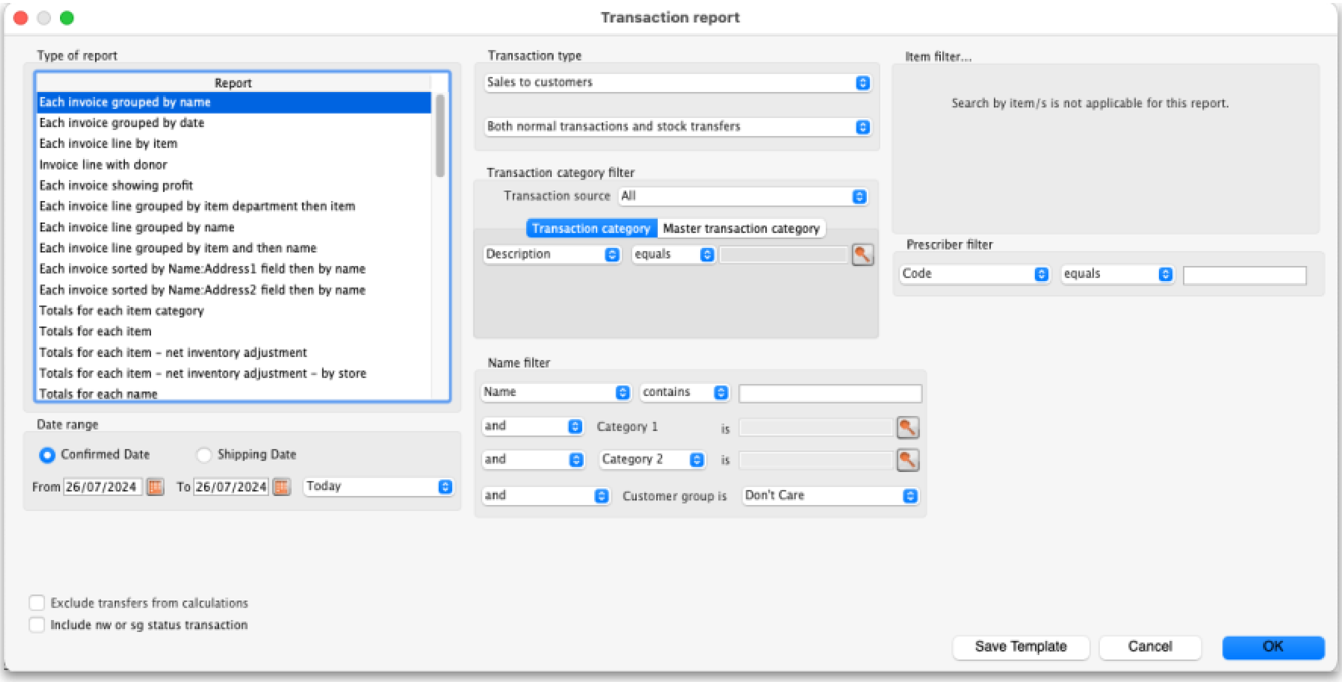
The basic sequence for creating a transaction report is this:

1. Select the type of report you want from the *Type of report* list in the top left.
2. Select the date range of transactions you want included in the report in the *Date range* section.
3. Select the transaction type you want the report to run over in the *Transaction type* section.
4. Set any other filters/settings you need to refine the contents of the report (Transaction category, Name, Item, Stock, Prescriber filter etc. sections).
5. Click on the **OK** button to run the report - you can select whether you export it to Excel or print it in the next window that opens (well, mostly - some reports are exported to Excel only so you won't have a choice for them).

See below for more in-depth detail on all these steps.

Standard transaction reports

This is the window you will see:



Type of report

Choose from several formats for displaying transaction information by:

1. selecting the report type in the Report list on the left, and
2. choosing the required radio button under *Transaction type*

The following table lists the available report names, and gives brief details of the information provided by each report .

Report name	What it does	Sample
Each invoice grouped by name	The report will sort each invoice in the date range according to the name (Supplier or Customer) and give totals for each name.	Sample
Each invoice grouped by date	As above, but totals given for each day.	Sample
Each invoice line by item	Lists each batch supplied or received, and the transactions for that item. This report can be very long	Sample
Invoice line with donor	As above, but including the 'donor' field and formatted to be most useful for analysis using Excel filtering and Pivot Tables. This report can be long.	
Each invoice showing profit	The cost and selling price totals for each invoice are displayed.	Sample
Each invoice line grouped by item department then item	The invoice lines are grouped by item department assigned to each item. Each item department is then sorted in alphabetical order. Includes batch information.	Sample

Report name	What it does	Sample
Each invoice line grouped by name	The value of batches received/supplied from/to each name. Includes batch level information.	Sample
Each invoice line grouped by item and then name	Invoice lines are all displayed, grouped by item and then, within those groups, by name. Includes batch information.	Sample
Totals for each item category	The total value for each category will be displayed - each transaction will not be shown.	Sample
Totals for each item	Each item that has been received (or issued) will be shown with the total quantity and value received/issued	Sample
Totals for each item - Net Inventory adjustment	Each item on which an inventory adjustment has been made is shown; the net adjustment is displayed, with both quantity and value shown.	Sample
Totals for each name	The invoice lines for the chosen date range are grouped together for each name. This report allows you to see quickly what has been issued to a customer or customers.	Sample
Totals for each item broken down by name	Lists all items, showing their distribution to recipient customers or delivering suppliers	Sample
Totals for each item dept broken down by item		Sample
Totals for each name broken down by item	As above, but listing customers or suppliers and items received by or delivered by them	Sample
Totals for each item department	The total value supplied/received for each item department is shown	Sample
Totals for each item grouped by day	The total quantity and value of each item is shown for each day.	Sample
Totals for each item grouped by month.	The total quantity and value of each item is shown for each month.	Sample
Totals for each item grouped by item description.	First the report is sorted by item then the total quantity and price of each item is shown. It also provides a grand total for the item quantity and price columns.	Sample
2 period comparison by item category	User selects two periods, and the transactions for each period form a column. The rows are determined by the item category. This is a special report that has different input options. See entry below.	
Totals for each item broken down by packsize	The packsize for each item and the number of packs issued.	Sample
Prescription and general issues over time	This report shows the quanity of items given to patients and other customers over a period of time, separated by month. It exports to Excel only and has 2 tabs; the *By Item* tab shows which prescribers prescribed what items and the *By Customer* tab shows which items were issued to which customers	Sample
Prescriber report	This report allows you to view the total value, mean item value and item count for prescriptions dispensed for each prescriber	Sample
Dispensing with patient name and prescriber	This report shows who dispensed what to which patients with which directions	Sample

Report name	What it does	Sample
Historic prices - Volume weighted average price	This report produces a volume weighted average price for all transactions within the specified time period, for items that are On the price list in the store that you are logged in to. Transactions that have have no transactions or a Cost price of 0 are ignored. Calculations are done on the basis of the Price list Catalogue pack size. (This is normally the same as the Preferred pack size, but not always!) Transactions that are not in the Price list Catalogue pack size will have their calculation adjusted accordingly. Items affected by this will have an asterisk (*) appended to the Item Description in the report.	
Cross tab: items in rows, names in columns, quantity in cells	These reports are like Excel pivot tables. Warning: they can be slow to produce if you have a lot of data. Start with small date ranges until you are comfortable your machine can handle the load. Note that reports that produce a lot of columns won't print well - it is better to export them to a spreadsheet and print from there.	Sample
Cross tab: items in rows, names in columns, value in cells	See above	Sample
Cross tab: items in rows, days in columns, quantity in cells	See above	Sample
Cross tab: items in rows, days in columns, value in cells	See above	Sample
Cross tab: items in rows, months in columns, quantity in cells	See above	Sample
Cross tab: items in rows, months in columns, value in cells	See above	Sample
Cross tab: names in rows, months in columns, quantity in cells	See above	Sample
Cross tab: names in rows, months in columns, value in cells	See above	Sample
Distribution of quantities issued	First the report is grouped by item name and then by the pack size issued. It displays the total quantity and total count for each item.	Sample
Totals for each item grouped by transaction category then item	The report is grouped by each item's transaction category first and then by each item.The report shows the total count, total quantity and total value for each item. Lastly it also calculates a grand total of the items count, quantity and value columns.	Sample

Report name	What it does	Sample
Each invoice sorted by Name >Address1 field then by name	The invoices are firstly sorted by the address1 field, and then by the name they were supplied to. This groups invoices together by whatever you entered in the "Address1" field for each name - e.g. you might enter the region or province.	Sample
Each invoice sorted byName >Address2 field then by name	As above, but the first sort is by the entry in "Address2" field.	Sample
Customer ordered short fall report	Where there has been a shortfall, this report shows the shortfall of each item and of each item category by quantity and percentage. It shows what demand from customers has been met and what has not. It applies only for issues to customers.	Sample
Customer transaction report 1	This report and the following three are, in fact, templates, and are the starting point for designing reports on specific criteria not covered in any of the existing reports.	Sample
Customer transaction report 2		Sample
Customer trans line report 1		Sample
Customer trans line report 2		Sample
Received vs. sent	Shows the difference between stock issues from a supplier and stock receipts for the same lines at the customer. If you choose *Purchases from suppliers* as the **Transaction type** then the report will run over supplier invoices and show differences between what the current store was sent from the supplying store (on customer invoices) and what the current store received on the corresponding supplier invoices. If you choose *Sales to customers* as the **Transaction type** then the report will run over customer invoices and show differences between what was sent from the current store (on customer invoices) and what was received on the corresponding supplier invoices in the receiving store. **WARNING:** any non stock-transfer transactions included in the report (if you select *Normal transactions* or *Both normal transactions and stock transfers* in the **Transaction type** section) will show a full difference because there is no corresponding customer or supplier invoice. So it is recommended to only choose the *Stock transfers* option in the **Transaction type** section for this report.	received_v_sent.pdf
Months to expiry		Sample
Order processing time	If you are filling out the order written date and order received date for incoming customer orders, then this report will show you how long it is taking for orders to reach the store, and how long it is taking to process orders from receipt to order entry and to order dispatch	

Report name	What it does	Sample
Historic prices - Volume weighted average price	Calculates the Volume weighted average price for all items in the catalogue in those stores (i.e. where the item's **On price list** checkbox is ticked (see the 4.01.03. Items - Misc(ellaneous) tab page for details)) for all confirmed or finalised supplier invoices within dates provided by the user for all selected stores. Please note: * Transactions where the stock has a cost price = 0 will not be included in the calculation. * Items that have had no transactions within the selected period will not appear in the report. * The **On price list** checkbox must be set for each store. This will be important if you're running the report over more than one store.	

Transaction type

In the first drop down list, you can choose to report on:

- **Sales to customers:** customer invoices i.e. transactions of type *ci*
- **Sales to and credits from customers:** customer invoices & customer credits i.e *ci* and *cc* transaction types
- **Purchases from suppliers:** supplier invoices i.e. transactions of type *si*
- **Purchases from and credits to suppliers:** supplier invoices & supplier credits i.e. *si* and *sc* transaction types
- **Inventory adjustment - Add stock:** All inventory adjustment transactions that resulted in stock additions (e.g. when you did a stock take of an item and counted more on the shelf than the total shown in mSupply).
- **Inventory adjustment - Reduce stock:** All inventory adjustment transactions that resulted in stock reductions (e.g. discarding stock due to it being expired). Note that using a report that shows the total for each transaction category can give totals for expired/damaged etc.
- **Inventory adjustment - Net movement:** Taking into account both reductions and additions, the nett change in inventory due to adjustment transactions.
- **Customer invoice cancellations:** These are the “inverse” invoices created when a customer invoice is cancelled
- **Credits to customers:** The credits applied to customers when invoices are cancelled or when goods are returned.
- **Payment cancellations:** The “inverse” payments created to reverse a payment made by a customer for a customer invoice that has a payment against it and has been cancelled.

In the second drop down list, you have the following options:

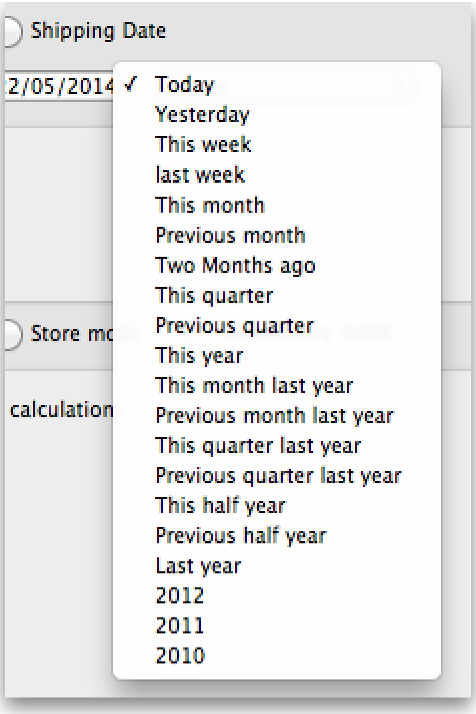
- **Both normal transactions and stock transfers**: this is the default option and means that both stock transfer and non-stock transfer transactions will be included in the report
- **Normal transactions**: all transactions that are **not** stock transfers will be included in the report
- **Stock transfers**: only stock transfers will be included in the report

A stock transfer is a transaction made when the supplier or customer is another store in your datafile. A normal transaction is when the customer or supplier is a normal customer or supplier in your datafile, and not a store.

Date range

Enter the date range of transactions to report on, having selected *Confirmed date* or *Shipping date*. Note that the date used may differ from the original entry date, depending on how your system is configured in the Preferences.

- Note the popup menu to the right of the date entry fields that allows you to choose quickly from a list of common date ranges:



- Note that “last year” refers to the year preceding the current year (that is, if the current year is 2012, choosing “last year” will set the dates from 1st Jan 2011 to 31st Dec 2011).

Transaction category filter

Assuming you have set up transaction categories, your report may be filtered by category. For help setting up Transaction categories click see sectrion 22.07. Transaction categories.

- Transaction source: Options are “All”, “Customers, Suppliers and Stores” or “Patients”. This allows you to select the type of Name the transactions must belong to. If you select *Patients*, only transactions which have a name that is a patient will be inccluded in the results (e.g. prescriptions). If you select *Customers, Suppliers and Stores* then transactions that have a name which is a normal supplier (e.g. supplier invoice) or customer (e.g. customer invoice) or store (e.g. stock transfer) will be included in the report. If you select All then this filter is effectively not used and transactions with any name type are included in the report.
- Transaction category: Use the magnifying glass to choose the transactions categories to be included in the report. Note that you can select more than one category. The types of categories offered in the list will match your selection in the Transaction type section.
- Master transaction category: If you prefer, you can choose to filter by master transaction category instead. Master transaction categories are used to group together transaction categories (so selecting one of these is like selecting multiple categories in the Transaction

category filter - it's just more convenient to do it this way if you regularly need to choose several. We love to make things easier for you!). Again, see 22.07. Transaction categories for details on setting them up.

Name filter

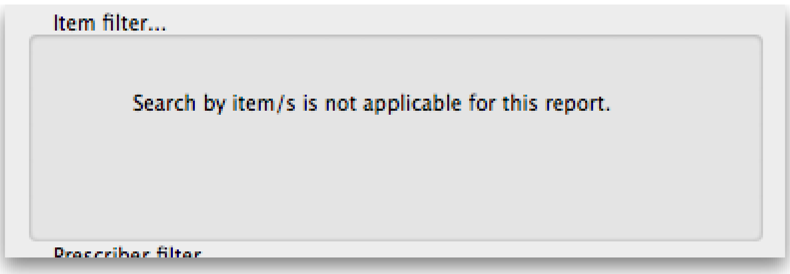
You can enter a particular customer code or category of transactions to be displayed.

- You can choose from either *equals* for an exact match or *starts with* to search for all names whose code or category starts with the entered text.
- Each name has 6 different categories that can be used to group certain kinds of names together. You can filter on category 1 (which is hierarchical) using the *Category 1* filter in the screenshot at the top of the page (note that the *Category 1* text will be replaced with any name you have assigned to this category in the preferences) and one of the other categories using the *Category 2* filter shown in the screenshot at the top of the page.
- If you want to report on transactions for a single name, you can find their code by looking up their details using *Supplier > Show suppliers* or *Customer > Show customers*.
- There is also a *Customer group* filter you can use to include names based on their customer group.

Item filter

Here you can specify the items to include in the report.

Note that sometimes the item choice options will be hidden because the chosen report is reporting on transactions, not on transaction lines:



Donor filter

If you have donor tracking turned on in the preferences, and choose a report that bases it's data on invoice lines, then you will be given the option to filter the report for a particular donor or group of donors.

Which mode?

If you are using mSupply in both store and dispensary mode, you might want to report only on transactions in store mode (items distributed to customers) or in dispensary mode (items distributed to patients). You can do this by checking *Store mode* or *Dispensary mode* radio button depending on your requirements.

Exclude transfers from calculations

This checkbox enables you to choose whether you include stock transfers (where stock is transferred from one store to another in mSupply) in the report calculations. If you want stock transfers to be included in your report then uncheck this checkbox. If you want stock transfers to be left out of the report then check this checkbox.

Include nw or sg status transactions

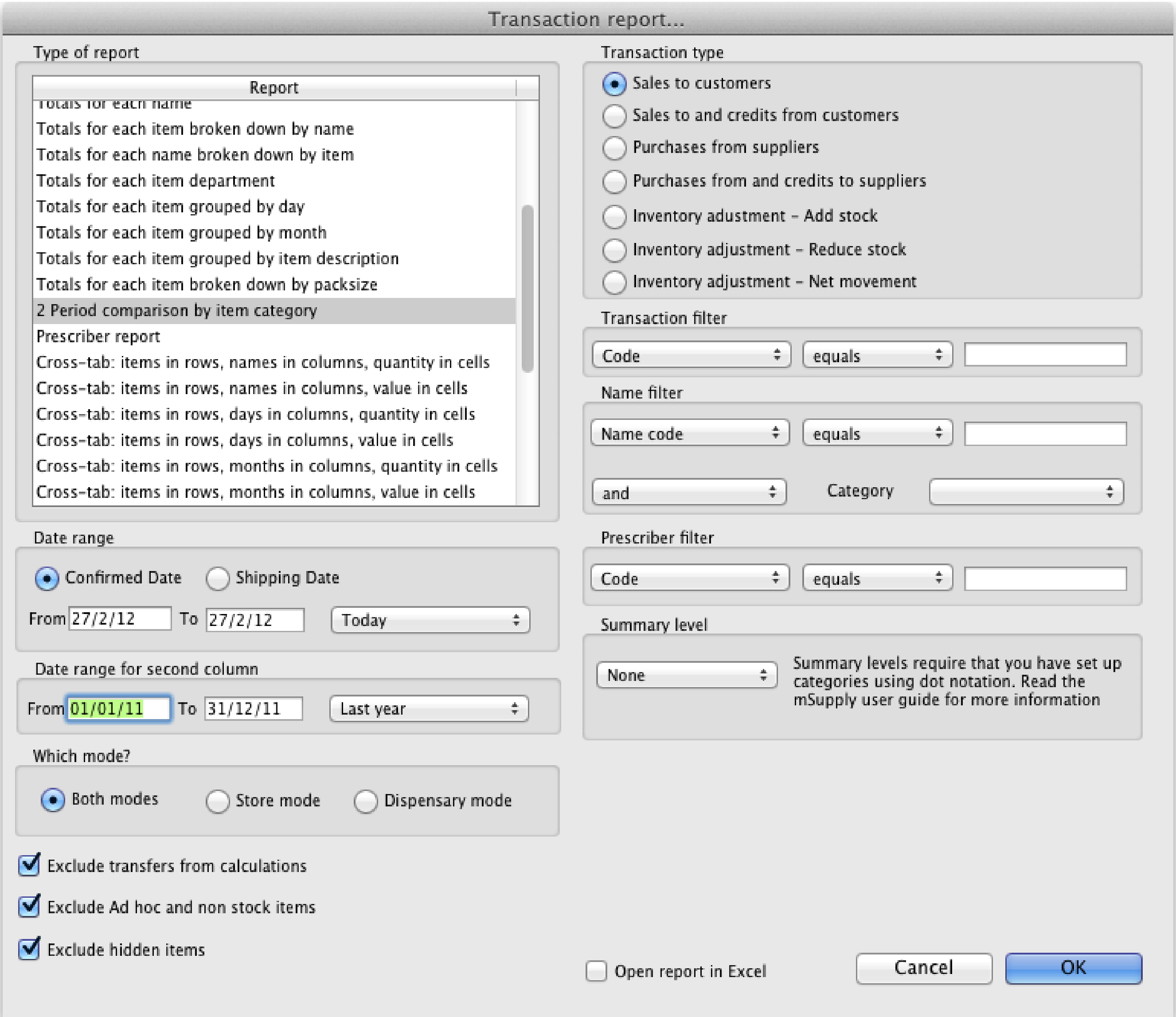
By default only confirmed ('cn') or finalised ('fn') status transactions (i.e. those that have affected stock) will be included in transaction reports. If you want to also include new ('nw') or suggested ('sg') status transactions in your report (i.e. those that have not affected stock yet) then check the **Include nw or sg status transactions** checkbox.

Note that, for confirmed and finalised transactions, the confirmed date is used to compare with the date filter to decide whether it is included in the report or not. New and suggested transactions do not have a confirmed date so the entered date is used instead to compare against the date filter.

The 2 period comparison by item category report

This report allows you quickly to compare sales or purchases for 2 periods of your choice based on item categories.

When you choose this report a different set of options is shown.



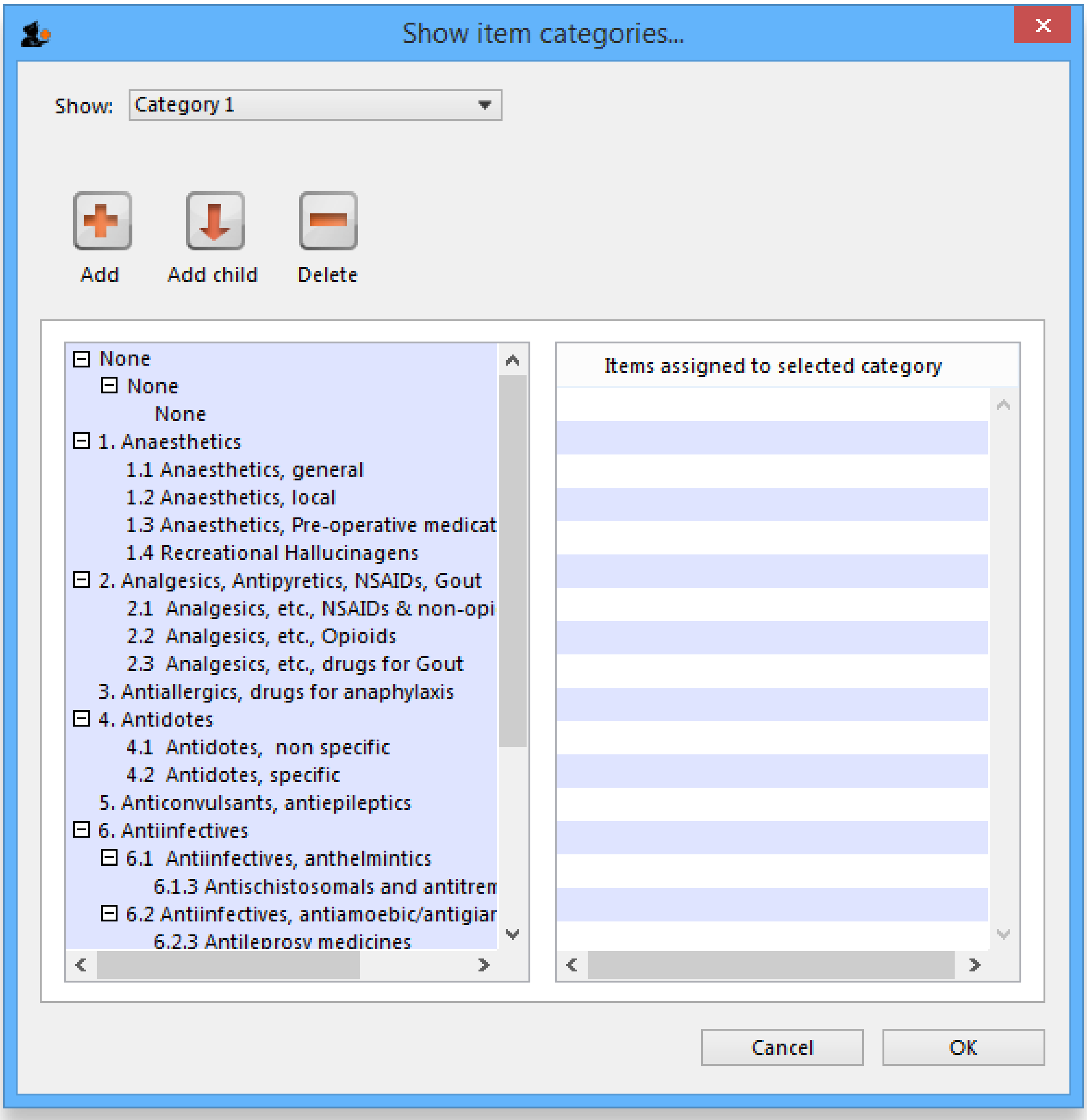
Set the date range for each of the columns and then choose a summary level. It should be noted that if no data is present for the first period defined, this report will not run.

Dot notation and summary levels

The summary level is based on the item category field. If you have set up item categories using dot notation, then you can summarise categories.

To set up item categories, choose **Items > Show item categories**

Take the following simple example of categories that have been set up as follows:



The rules for dot notation are

- Separate each level of your hierarchy with a period (dot).
- Within a level you can have as many characters as you like
- You can use any characters, as long as you don't use a period or a space within one level; e.g. “surgical.gloves.small” is a valid entry. (Level one is “surgical”, level two is “gloves” etc.).
- When the hierarchy part of the category name is finished enter a space character. You can then enter a description for that level of the hierarchy.

If we run the report with a summary level of “none” each category is shown

Comparitive Transaction Report
The secret pharmaceutical store

Category	From 01/10/2005 to 28/12/2005	From 01/07/2005 to 30/09/2005
None	1,094,625.43	244,286.00
1 antibiotics	0.00	0.00
1.1 Penicillins	0.00	0.00
1.1.1 Broad spectrum penicilins	1,289.90	8,579.24
1.2 Tetracyclines	41.00	107.08
2 Antidiabetics2	0.00	0.00
2.1 Insulins	8,645.00	34,665.00
2.2 Oral Hypoglycaemics	466.40	1,848.00
3 surgical	0.00	0.00

If we run the same report with level one chosen, only the first level of the hierarchy is shown. Items with categories 1.1 and 1.2 and 1.1.1 have all been summarised under “1 Antibiotics”

Comparitive Transaction Report
The secret pharmaceutical store

Category	From 01/10/2005 to 28/12/2005	From 01/07/2005 to 30/09/2005
None	1,094,625.43	244,286.00
1 antibiotics	1,330.90	8,686.32
2 Antidiabetics2	9,111.40	36,513.00
3 surgical	0.00	0.00

And with level two chosen, items with category 1.1.1 and 1.1.2 are summarised under the heading “1.1 Penicillins”

Comparitive Transaction Report
The secret pharmaceutical store

Category	From 01/10/2005 to 28/12/2005	From 01/07/2005 to 30/09/2005
None	1,094,625.43	244,286.00
1.1 Penicillins	1,289.90	8,579.24
1.2 Tetracyclines	41.00	107.08
2.1 Insulins	8,645.00	34,665.00
2.2 Oral Hypoglycaemics	466.40	1,848.00

Note that if you have items to which no category has been assigned, they are shown under the heading `none“ at the top of the report.

The categories are printed in the order that you have specified by drag-and-dropping in the window shown by choosing **Item > Show item categories….**

Transaction filter: Filters the report for given category

Prescriber filter: Reduces the found transactions to those for the given prescriber only, depending upon the selection made (equals, starts with, contains, is not equal to).

- Obviously only useful in dispensary mode.

Exclude transfers from calculations: The check-box *Exclude transfers from calculations* when checked will ignore transfers between stores within the organisation.

Exclude Ad Hoc and non stock items: The check-box *Exclude Ad hoc and non stock items* is displayed accordng to the type of report selected. By default, it is checked.

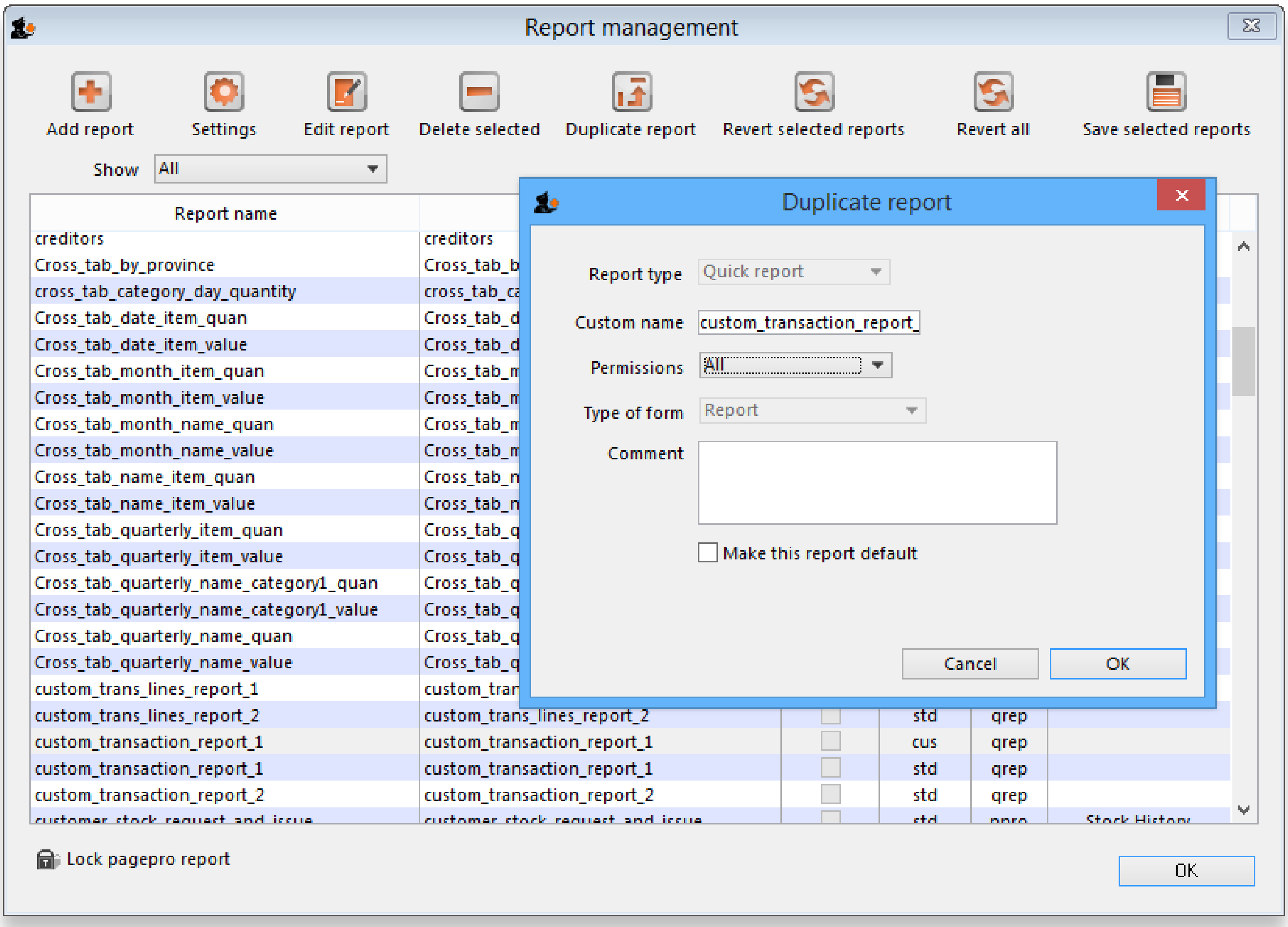
When checked, the transaction report generated will not include any Ad Hoc items or non stock items (items you don't normally keep in stock).

Custom transaction and trans lines reports

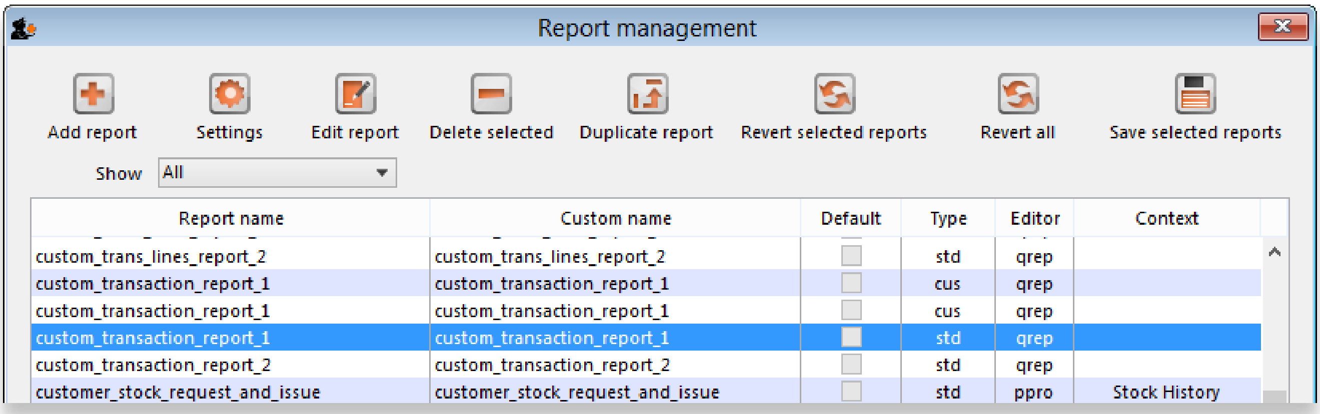
These four reports should be regarded as templates for you to design your own report .

Having decided whether you wish to report on transactions or transaction lines, you need to design the report according to your specific needs. Coose *Reports > Manage Reports* :

You are presented with the *Report management* window. In this example, our report will be on transactions, so you should highlight *custom_transaction_report_1* , and click onthe *Duplicate report* button:



Choose an appropriate name for your report, and any comment you wish, and click **OK**. You are returned to the *Report management* window, where you should scroll down until you reach the report you have created; note that the name you gave the report will appear in the *Custom name* column; highlight the row and click *Edit report* .

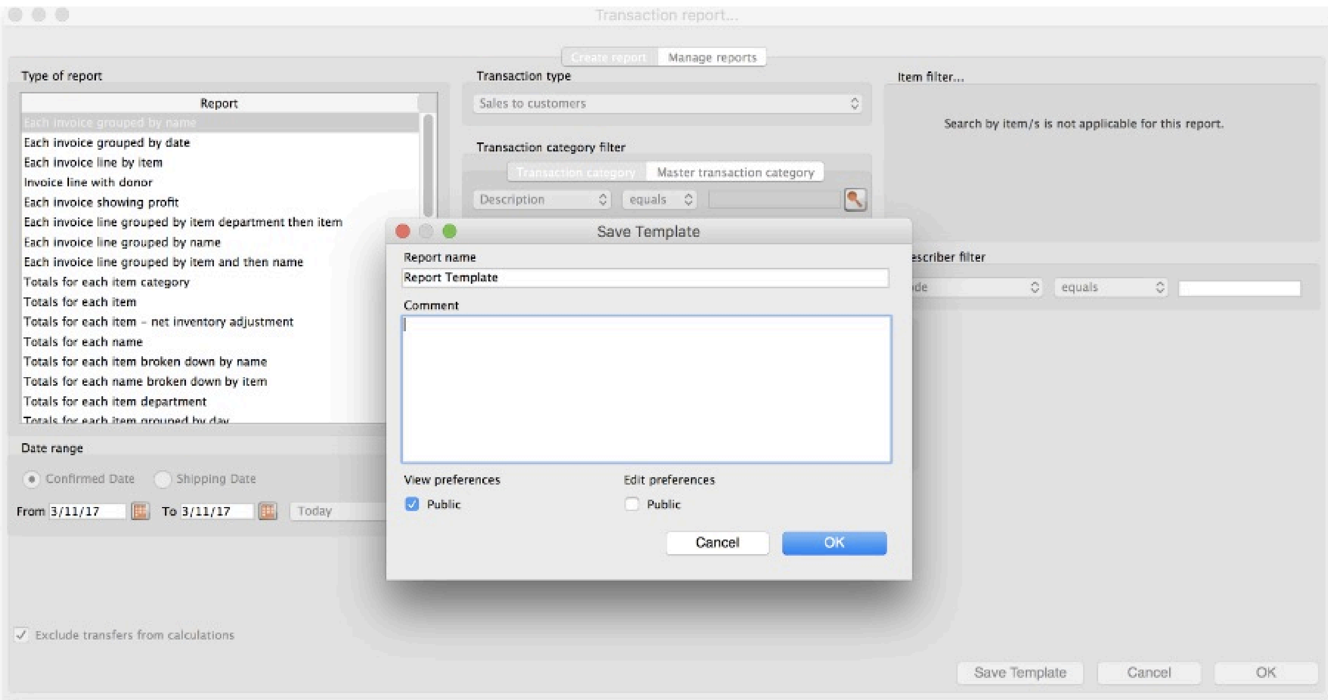


This brings up the **Edit report** window. Creating custom reports is described in detail earlier in this chapter. See the Custom Reporting Tutorial

Save template button

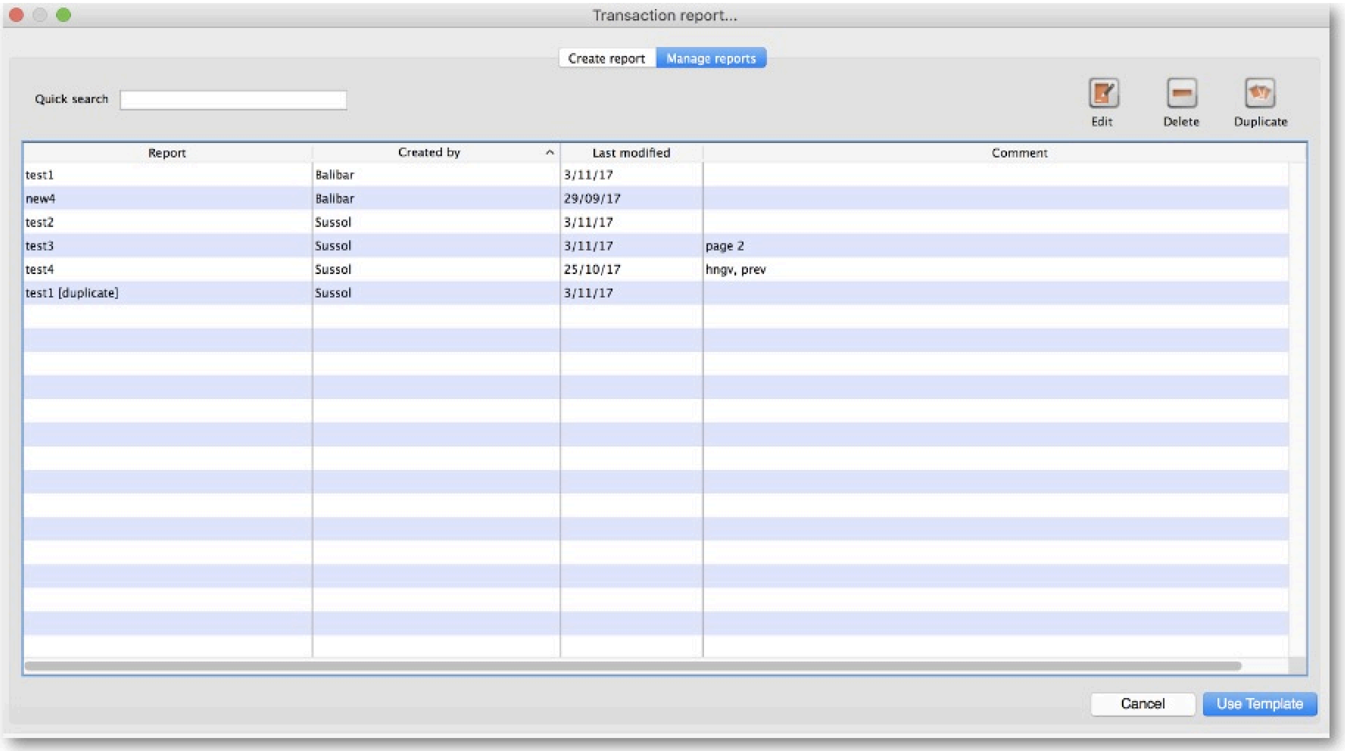
The save template button allows you to save a given report as a template once you have input your chosen settings. Templates can be reused as needed.

Pressing the Save Template button brings up the following window:



This dialog allows you to set a name and description for the report template. You can also define user permissions: at the moment, you can define these as 'Public' - for anyone, or 'Private', in which case the permissions only apply to the user who created the template.

- View Preferences: define which stores will be able to view and use the template on the ‘Manage Reports’ tab (next screenshot).
- Edit Preferences: define which stores will be able to edit or delete templates on the ‘Manage Reports’ tab.



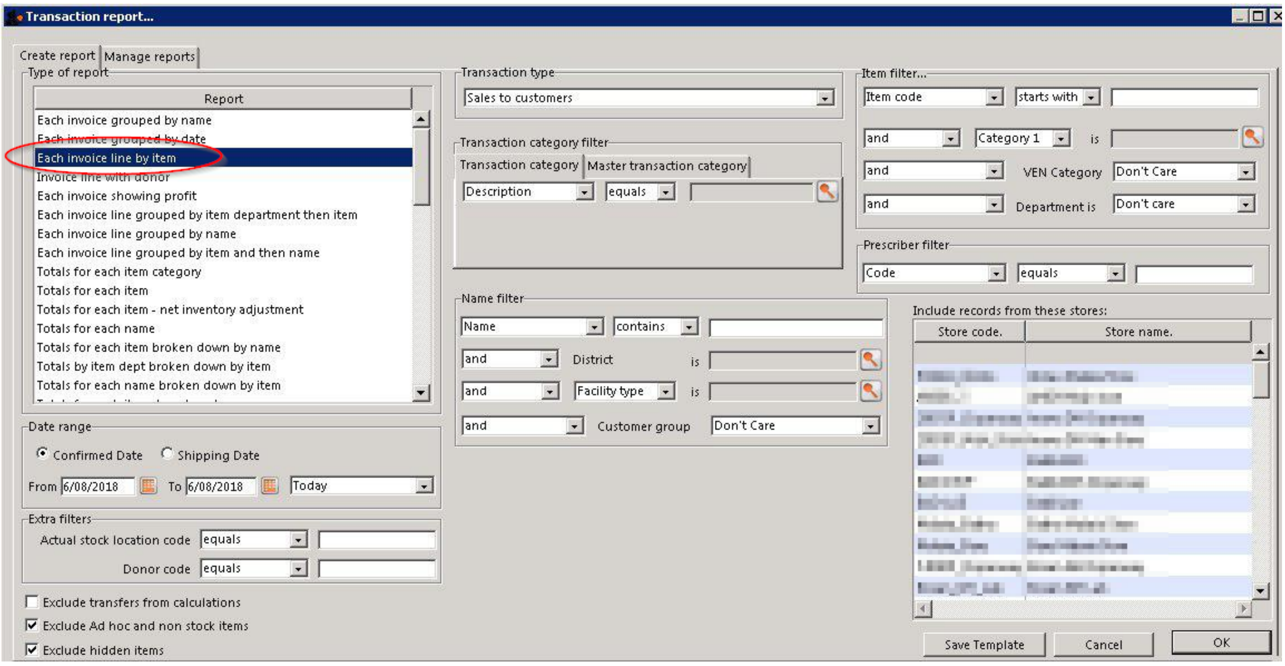
- Displays all template reports that the user has permissions to view.
- Allows user to use the template:
    - Redirects user to ‘Create Report’ tab
    - Settings here will be set according to the preferences of the template report
- Users can also edit, delete, and duplicate the reports if user permissions allow.
    - Duplicated reports will be named ‘ReportName[duplicate]’
- Quick search searches in all text columns of the table.

Pivot table friendly transaction report

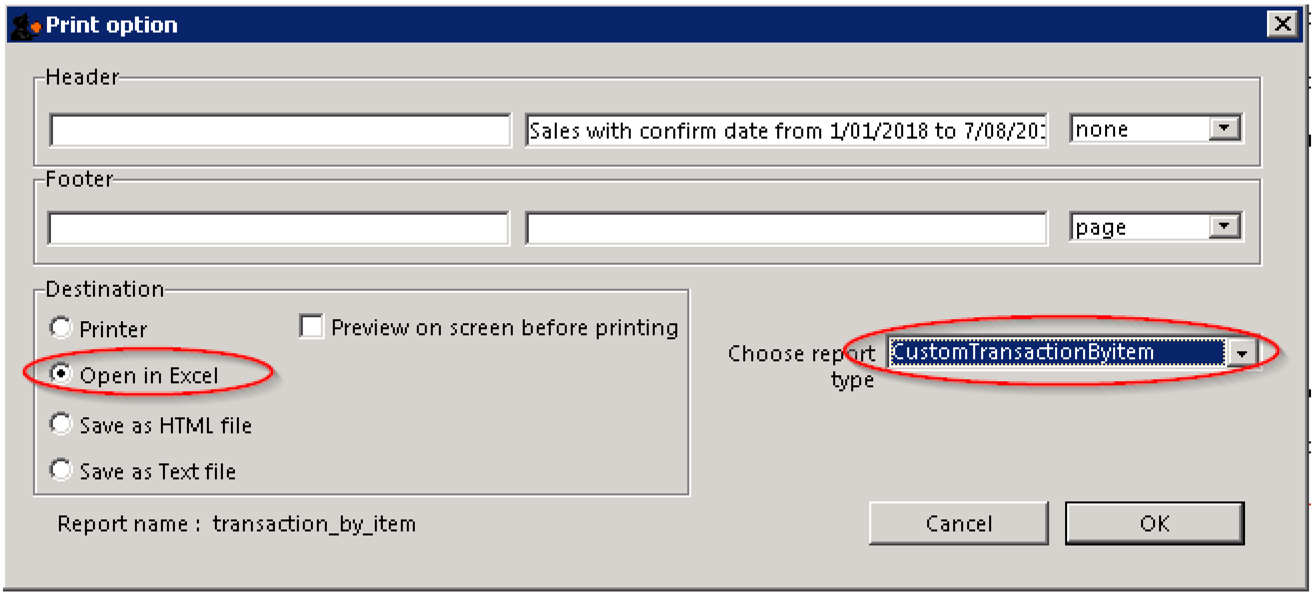
There is an almost infinite range of reports that you might want to generate from transaction data. If you are comfortable using Excel Pivot tables, there is an mSupply transaction report format that you will likely find quite useful. This report has been designed to work in Supervisor Mode but will also work in a single store.

To generate it:

1. click on Reports > Transaction
2. After configuring the various date range, Item, Name, transaction type, etc. filters
3. Select the **Each Invoice Line by Item** report in the top left



4. Then, select `CustomTransactionByItem` report type and send the output to **Open in Excel**

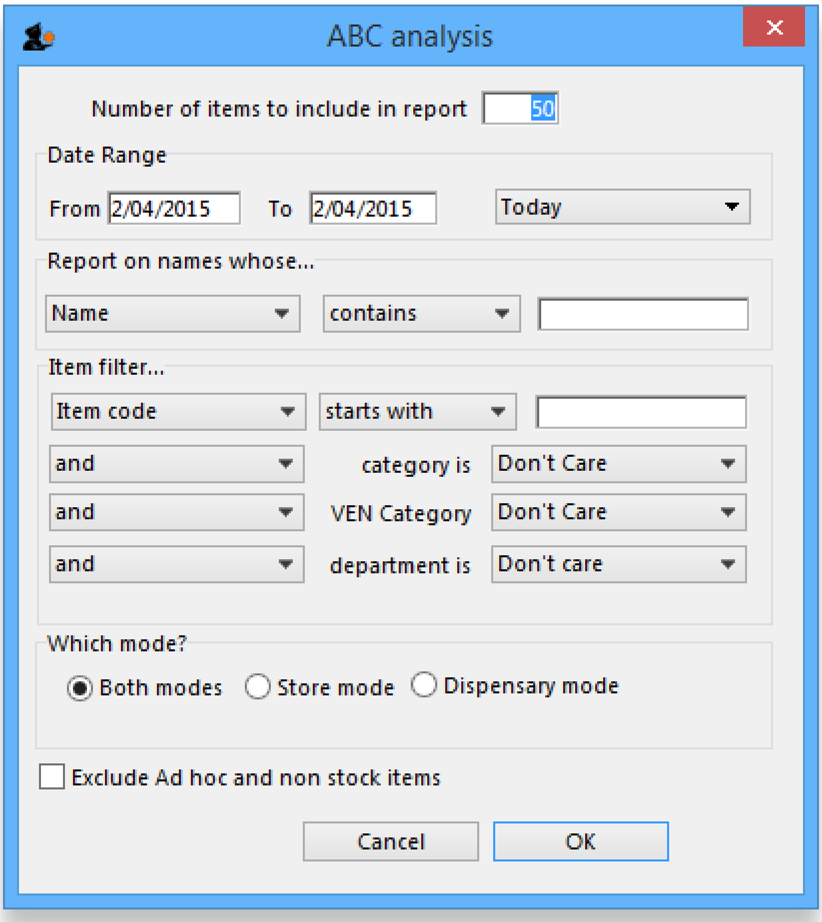


The report will open in Excel in a form that can then be easily filtered, sorted and manipulated through a Pivot table. If fact, the records are not sorted at all, so they must be processed to make any sense!

*Previous: **13.02. Stock and items reports** | | Next: **13.04. Purchasing reports***

13.11. Other reports

ABC analysis



This report will rank the items based on the value sold in the period specified. Sometimes such a report is referred to as an "ABC" analysis or a "pareto" analysis. Statistics show that 20% of the items supplied by an organisation usually generates 80% of the total value of sales. Therefore, it is useful (and wise!) to concentrate first on the 20% of items that are most important. This report makes it easy to do just that.

You might be interested in what Wikipedia has to say about ABC analysis

You need to enter the following information:

Number of items to include in report: Enter the number of items to be included in the report.

Date range: Enter the dates you wish here. Each item will have its "analysis" field updated with the total value of sales during the period specified.

Filters: Should you wish to apply filters to the report, three are available - for items, categories and departments.

Which mode: You can choose store mode, dispensary mode or both modes of transactions for inclusion in the report.

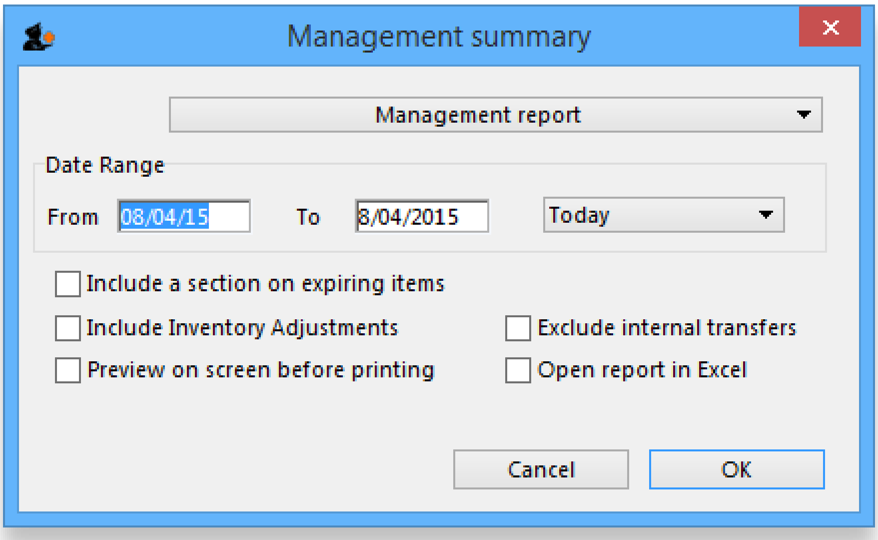
Exclude Ad Hoc and non stock items: If you check this box then Ad Hoc and non stock items will not feature in the report.

The report lists the number of items specified, ranked by value of sales, starting with the highest. The value of sales and the percentage of the total value are also shown. Note that the total value is the total for the items in the report, not the total sales for all items. If you want to report on the total for all items, set the *Number of items to report on* to a number greater than the number of items in your data file (Note that this may make the report very long, but you can choose just to print the first few pages if you wish).

Management summary

This report is designed with line managers in mind, or other people who want to "keep their finger on the pulse" of their organisation but are not interested in the fine detail!

You'll be shown a window where you can choose a date range for the report:



The report provides the following information:

- The total value of stock on hand
- The 10 items with the largest stock value
- The 10 items with the largest value of supply to customers in the date range chosen.
- The 10 suppliers from whom you have purchased the most in the date range chosen.
- The 10 customers to whom you have supplied the most in the date range chosen.
- If you check the "Include section on expiring items" checkbox, a section will be included that lists:
- The cumulative liability for expiring items for each of the next 12 months.
- The 12 most valuable expiring items (or at least batches of particular items)

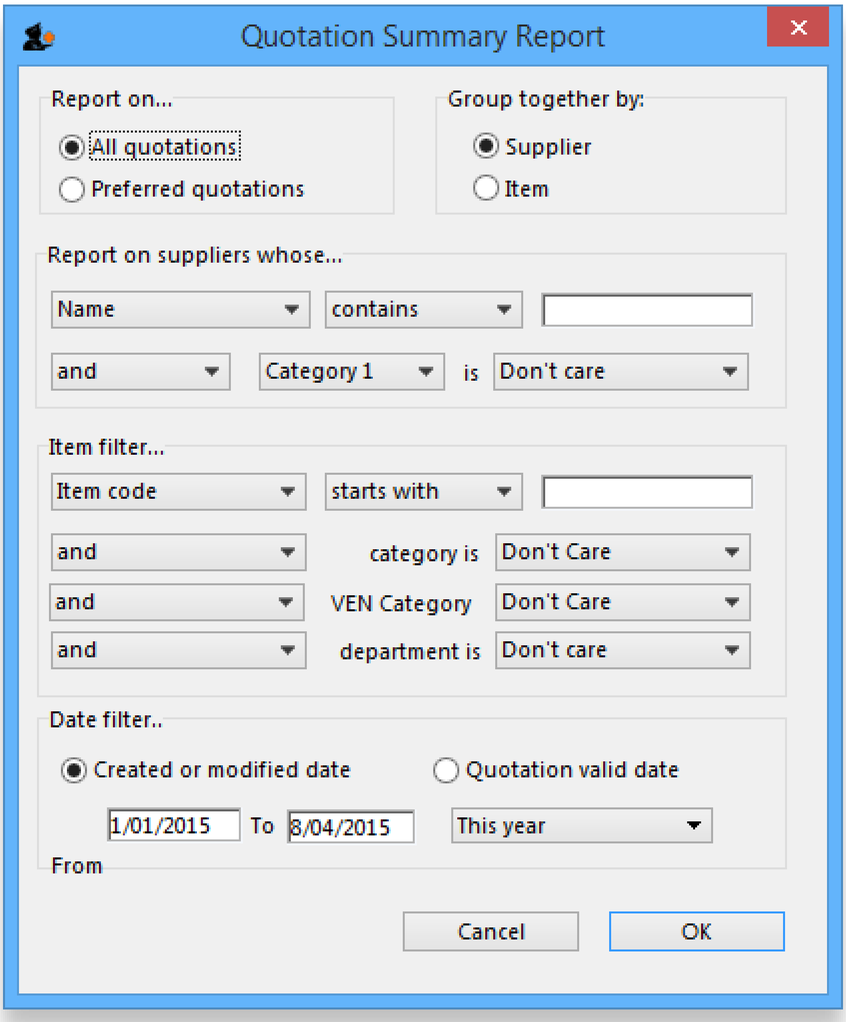
Preview on screen before printing

Check this box if you want to view your report on screen first.

Open report in Excel

Check this box to view the report directly in your chosen Spreadsheet program.

Quotation summary



There are two options in *Report on* section, namely: *All quotations* and *Preferred quotations* , and there are two options in *Group together by* section, namely *Supplier* and *Item*

All quotations shows the quotations in which *Preferred* is set to “true or false”.

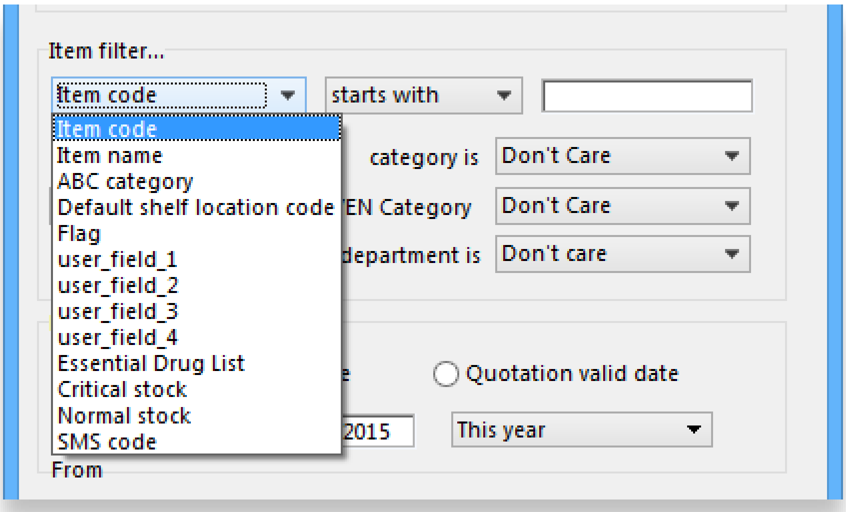
Preferred quotations shows only those quotations in which *Preferred* is set to “true”.

Supplier option displays the quotation report on the basis of supplier.The quotations for the items related to a particular supplier are listed along with that supplier.

Item option displays the quotation report with the items arranged in alphabetical order along with the corresponding supplier's name.

In addition there are filters allowing you to narrow your search further by:

- limiting the report to suppliers meeting your specified criteria - e.g. the supplier's name code may be entered, so the resulting report will display only quotations from that particular supplier.
- specifying criteria relating to the item by choosing from the many options in the drop-down boxes as shown below:



There is an additional filter, the Date filter, allowing you to specify the dates on which the Quotations you are examining were created or modified, and the radio button toggles display of the quotations' expiry date (*Quotation valid date*) on or off.

Sync report

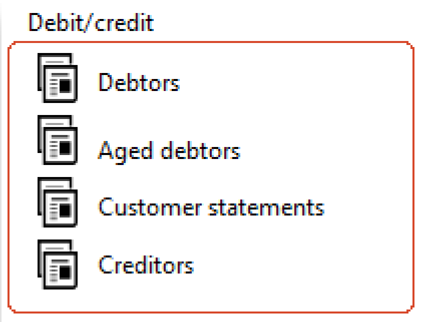
This report allows you to track simple remote site activity. There is more in depth remote site activity available on the mSupply dashboard (see the https://docs.msupply.foundation/dashboard/introduction/ page for details). To run it, choose *Report > Sync report...* from the menus. There are no filters and the report will open automatically in your default spreadsheet application. It looks like this:

Sync Out report

Site ID	Site name	Pending sync out records	First sync date	Recent sync date	Days since last sync	Number of stores	App type	Version
108	[illegible]	4050	11/06/2024	07/03/2025	34	2	mSupplyServer	7.0515
1077	[illegible]	1486	12/06/2024	19/03/2025	22	1	desktop	5.07
1053	[illegible]	32002	00/00/00	00/00/00	0	1	mobile	
155	[illegible]	2484	20/06/2024	19/03/2025	22	1	mSupplyServer	7.0515
2369	[illegible]	122	17/03/2025	19/03/2025	22	1	mSupplySingleUser	8.00.17
1061	[illegible]	13694	01/07/2024	01/10/2024	191	1	desktop	5.07
2099	[illegible]	167	17/02/2025	20/03/2025	21	1	mSupplySingleUser	8.00.07
1050	[illegible]	5773	13/06/2024	12/03/2025	29	1	desktop	705.15
687	[illegible]	982	19/06/2024	18/03/2025	23	1	mobile	8.6.6
913	[illegible]	36779	00/00/00	00/00/00	0	1	mobile	
1267	[illegible]	10740	24/09/2024	09/12/2024	122	1	mobile	5.1.1
2152	[illegible]	1661	11/02/2025	17/03/2025	24	1	mobile	8.6.6
737	[illegible]	9015	15/07/2024	05/02/2025	64	1	mSupplySingleUser	7.15.06
1	[illegible]	0	00/00/00	00/00/00	0	20	desktop	8.01.03
89	[illegible]	65050	00/00/00	00/00/00	0	0		
2294	[illegible]	2447	13/02/2025	11/03/2025	30	1	mobile	8.6.6
384	[illegible]	42507	00/00/00	00/00/00	0	1	mobile	
1644	[illegible]	19916	00/00/00	00/00/00	0	1	mobile	8.6.6
385	[illegible]	2966	12/06/2024	07/03/2025	34	1	mobile	8.6.6
395	[illegible]	3153	20/06/2024	03/03/2025	38	1	mobile	5.1.1
381	[illegible]	9675	26/11/2024	25/01/2025	75	1	mobile	8.6.6
2089	[illegible]	3265	27/11/2024	05/03/2025	36	1	mobile	8.6.6
394	[illegible]	1964	02/07/2024	15/03/2025	26	1	mobile	5.1.1
135	[illegible]	2372	10/06/2024	20/03/2025	21	2	desktop	5.07
228	[illegible]	2687	08/10/2024	20/03/2025	21	2	mSupplyServer	7.16.24
78	[illegible]	3086	10/06/2024	20/03/2025	21	2	mSupplyServer	8.00.17
302	[illegible]	2314	10/06/2024	20/03/2025	21	2	mSupplyServer	7.0515
367	[illegible]	1864	11/06/2024	20/03/2025	21	2	desktop	7.16.24
49	[illegible]	3441	10/06/2024	14/03/2025	27	1	mSupplySingleUser	7.0515
1968	[illegible]	2709	18/11/2024	05/03/2025	36	1	mSupplyServer	7.16.24

Debtors and creditors

The following reports are available:



Select the required report by clicking on it.

Debtors

This report will produce a list of all debtors. *mSupply* uses an open-invoice system of accounting for debtors, so the outstanding amount for each debtor is displayed; for debtors with more than one invoice outstanding, the amount displayed is the cumulative total of all outstanding invoices.

Note that the total outstanding on invoices is not reduced for any previous overpayment by a customer, but this is listed in a separate column in the report.

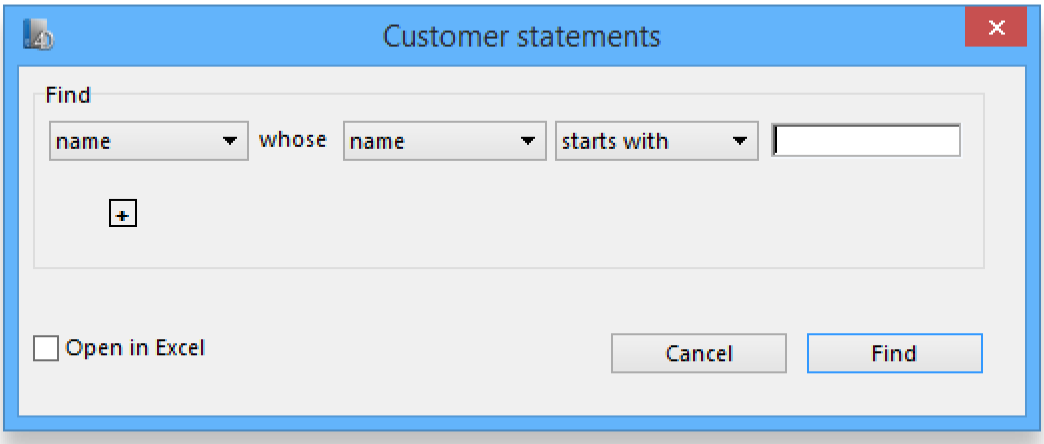
To remove overpayment amounts from the system, choose *customer* | *new payment…* and enter the name of the customer with an overpayment. You will be asked if you want to use the overpayment amount for this payment. Choose *use*, then allocated the overpayment to outstanding invoices.

Creditors

Aged debtors

Customer statements

You will be presented with a window to find customers.

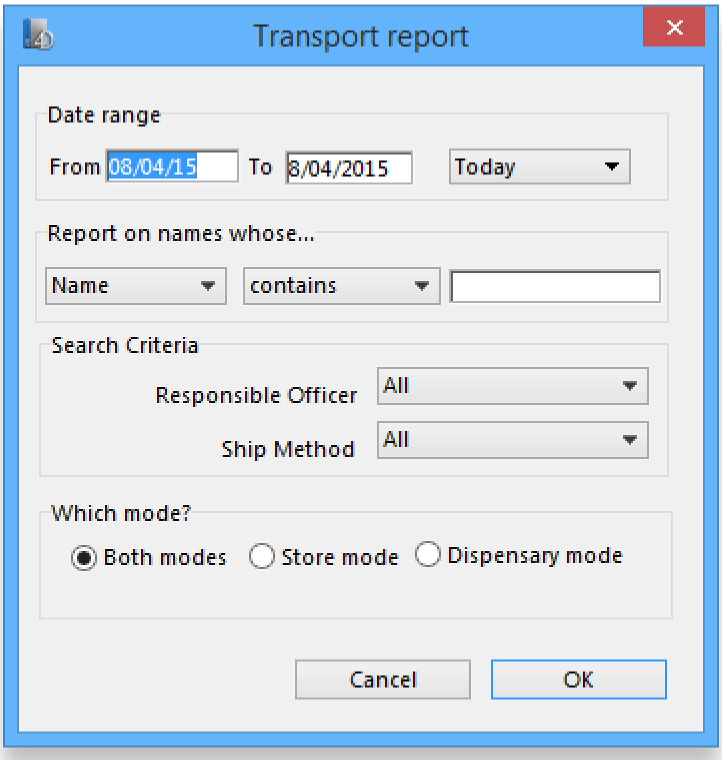


If you want a report for all customers, leave the entry field blank. Click *OK* and a report will be produced for any customers who match the criteria entered. Note that customers with no amount outstanding will not have a statement printed for them.

Transport report

This report allows you to print information about the transport details for a range of invoices.

First you are shown a window where you can select a date range and choose to report on only invoices supplied by a particular method, by a particular responsible officer, or to a particular name or names.



Click “OK” to run the report.
Note that transport details can only be entered on customer invoices if you have checked the “We use box numbers” option in the Preferences

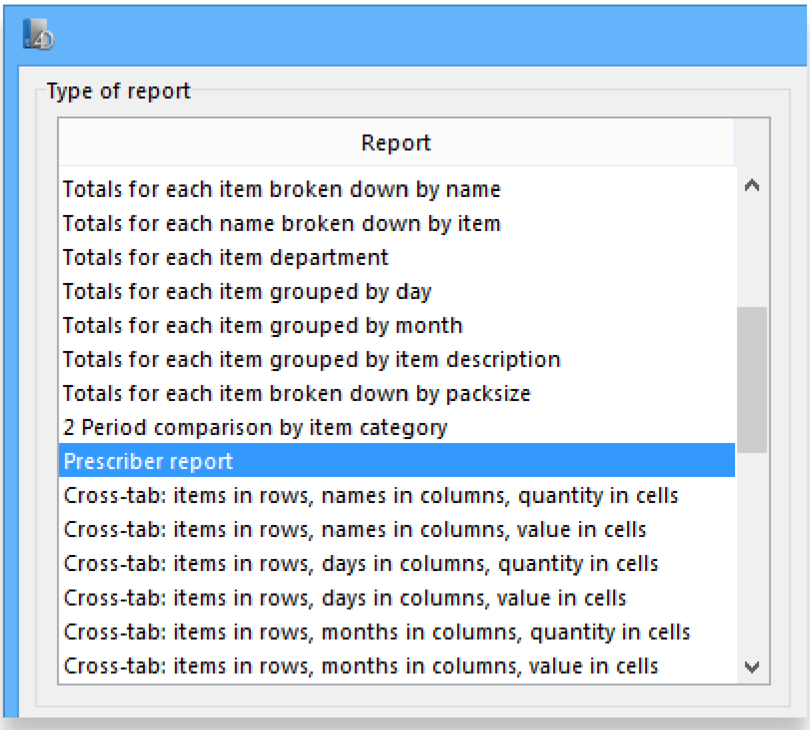
Prescriber report

The Prescriber report allows you to view the total value, mean item value and item count for prescriptions dispensed for each prescriber.

You will be shown a window with the normal date range options, and the option to report only on prescibers whose type field is set to a certain type.

Click OK to proceed.

The window that appears is the Transactions report, but you will see that the *Prescribers report* is highlighted.

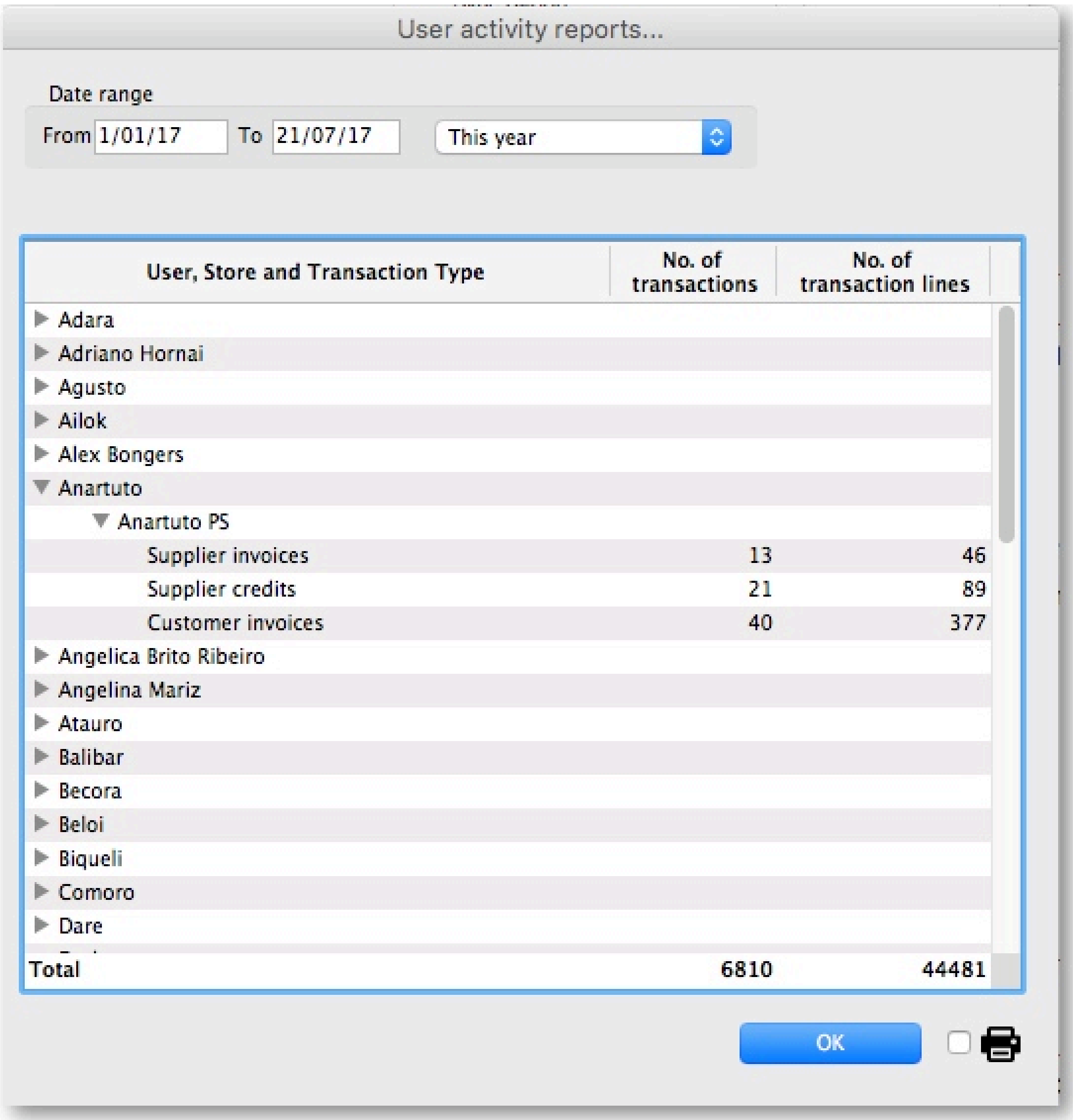


As usual, the report options window is shown where you can choose the destination and set headers and footers.

User activity totals

This report was initially made for use in dispensing situations where you want a quick count of the number of prescriptions and items issued in a day. However, it is also useful for getting a quick view of workload for a month or a year in store mode. This report gives the number of supplier invoices (or prescriptions) and the number of stock lines on them, reported by user.

Choosing this menu item shows a window like this (once you have selected a date range).



You can drop down to view data by clicking on the green arrows. Alternatively, you can click on the printer icon on the bottom right and export the full list to Excel.

Date range

You can either enter dates manually or choose from the drop-down list to the right of the date fields.

Time range

Enter times here in 24 hour format (e.g.. 9:00 in the “from” field and 17:00 in the “to” field. Leaving these fields on 00:00:00 will calculate for the whole day.

To calculate totals, click the *Show* button. If there are a lot of transactions to evaluate, a progress bar will be shown.

Click the *OK* button to close the window when you are finished.

Backorder report

This report shows the backorders that have been placed for items. Backorders are made when there is insufficient stock to meet the requirements of an order placed by the customer. Information about the item code, item name, current stock, customer code, the backordered quantity (number of units, not packs) and the date of the backorder is displayed.

If you are running a backorder system this gives you a quick way to check if backordered items are now in stock so they can be supplied to customers.

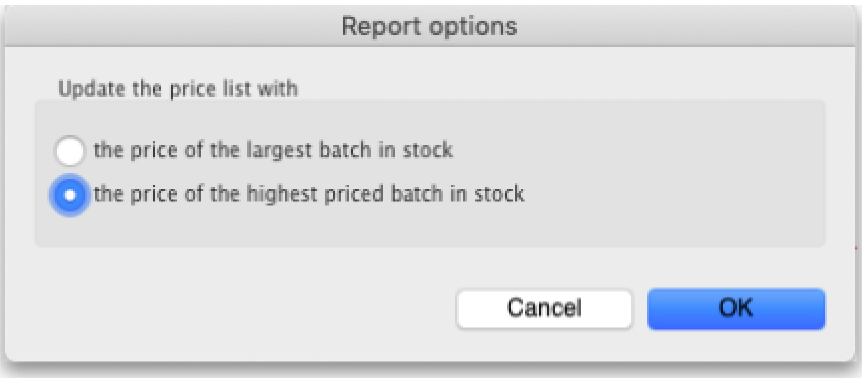
Suggest price list additions

Note: the price list menu items are for those organisations that produce a price list or price indicator. (It is useful to call your publication a “price indicator”, as it implies the published price is a guide, and not a fixed price). You are asked to specify the number of transactions and the number of months (e.g. 2 transactions in the last 3 months) that would make an item eligible for inclusion in the price list. A search is performed using the criteria you enter, and a list of items is shown that meet the criteria but are marked as not being in your price list. You can double-click on items in the list and click their “price list” check box to add them to the price list.

Update price list

This item updates the catalogue or price list prices of items with prices from their current stock lines. All items have separate catalogue prices in each store and they are displayed on the *Misc* tab of an item's details window catalogue (see the 4.01.03. Items - Misc(ellaneous) tab page for details).

When you click on the *Update price list* option, the report options window is shown, allowing you to check what price is used:



- **the price of the largest batch in stock**: sets the price list (catalogue) price to the sell price of the batch with the largest number of units (pack size x number of packs) in stock.
- **the price of the highest priced batch in stock**: sets the price list (catalogue) price to the sell price of the batch with the highest price (i.e. highest sell price/batch pack size value) of all current batches in stock.

Note that in both options, the *Catalogue pack size* is also set to the pack size of the batch that is used to set the catalogue price.

Only items whose *On price list* check box is checked are updated. If no items have this checked then mSupply aill tell you so and the update won't run.

Note that if an item has no stock, then the price for that item will not be altered.

mSupply will show you the progress of the update and will also tell you when it is complete.

It is a good idea to run the “suggest price list additions” report before running this function.

Price list

Only items that are marked as included in the price list (**Item** > **Misc** tab) are placed in a report, whether or not you have any in stock.

If you wish to export to a text file, choose “save to disk” in the report options dialog that is shown.

The exported file has fields separated by tabs and records separated by returns. The field order is:

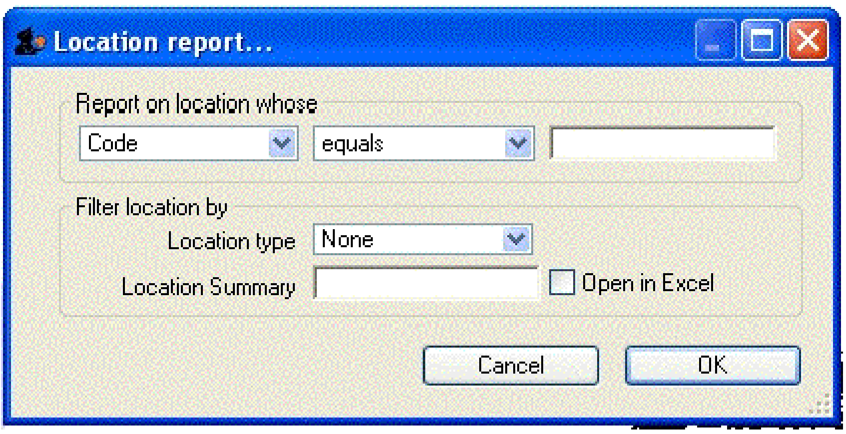
- Item
- pack size
- price.

If you wish to include different information, you can create a custom report to do this.

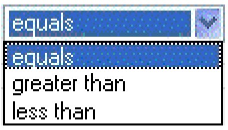
Location report

This report is available in version 1.96 and later.

This report lists the location description, type, capacity, used volume and percentage available. Choosing this menu item shows you the location report filter options widnow as below:



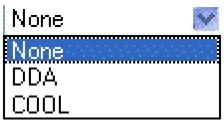
The report may be restricted to certain locations by using specific search criteria. Choose either “Code” or “Volume” from left drop-down list is . The centre drop-down list allows you to choose a comparitor.



You have to make an appropriate entry on the right-hand field. Leaving the field blank means no filter will be applied.

Location type

It allows you to choose a location type. You can select the one from the drop-down list on the right side. The graphic of location type is shown below.



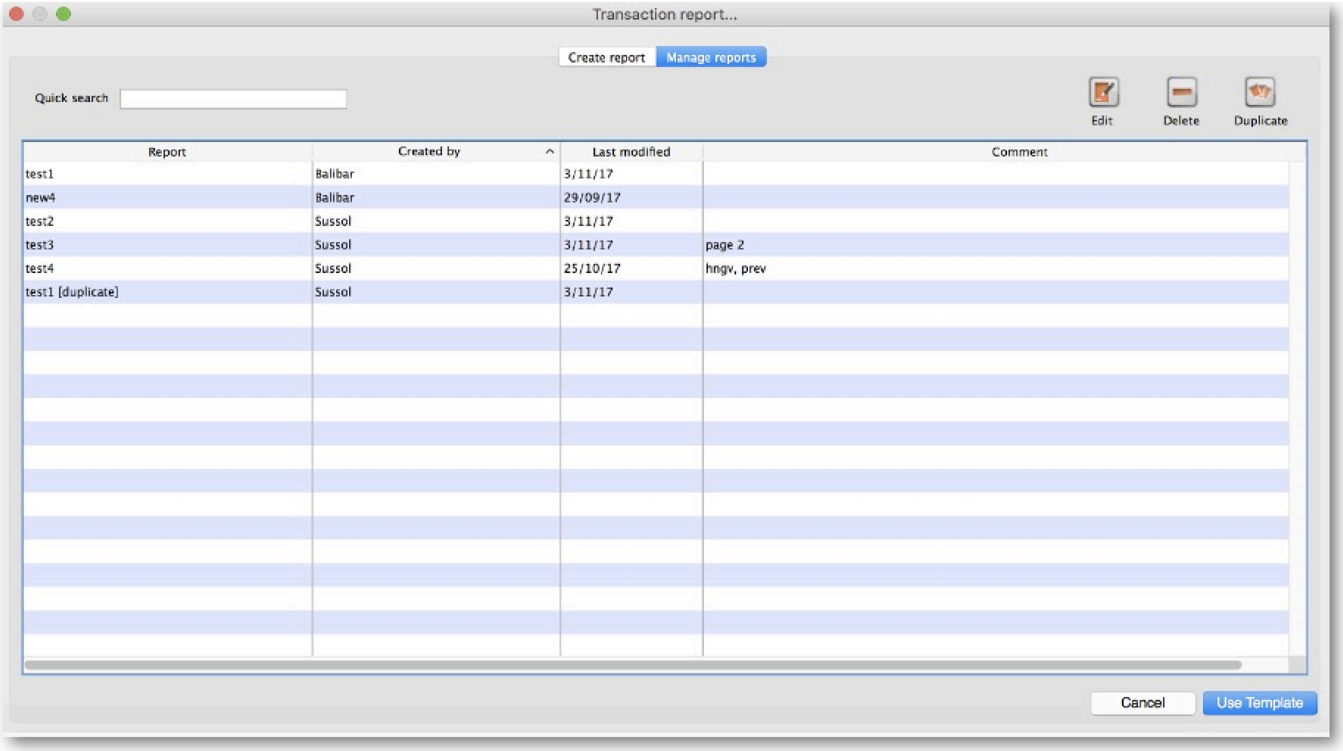
For example, you can specify the location type“COOL” to show only refrigerated locations.

Check the “open in Excel” checkbox if you wish to directly open the saved report in Excel (or any installed spreadsheet).

Click the OK button to run the report.

Manage reports

Choosing this item shows a list of built-in reports and any custom reports which have been designed:



The built-in reports may well be sufficient for your needs, but mSupply's versatility allows you to manage the reports to meet any specific requirements you have.

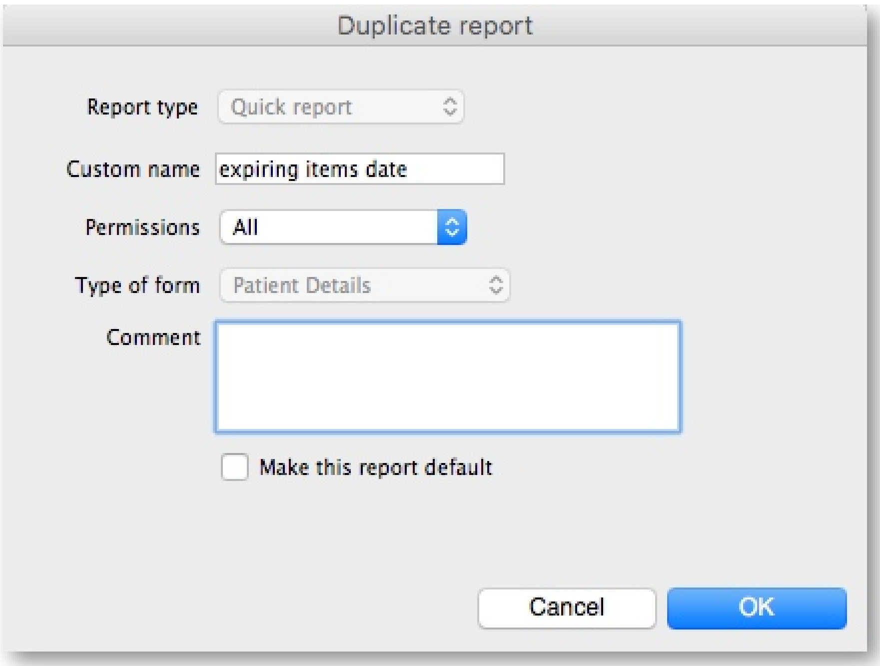
Options in the Report Management window:

Delete selected reports

Report(s) no longer required may be selected and deleted from mSupply

Duplicate report

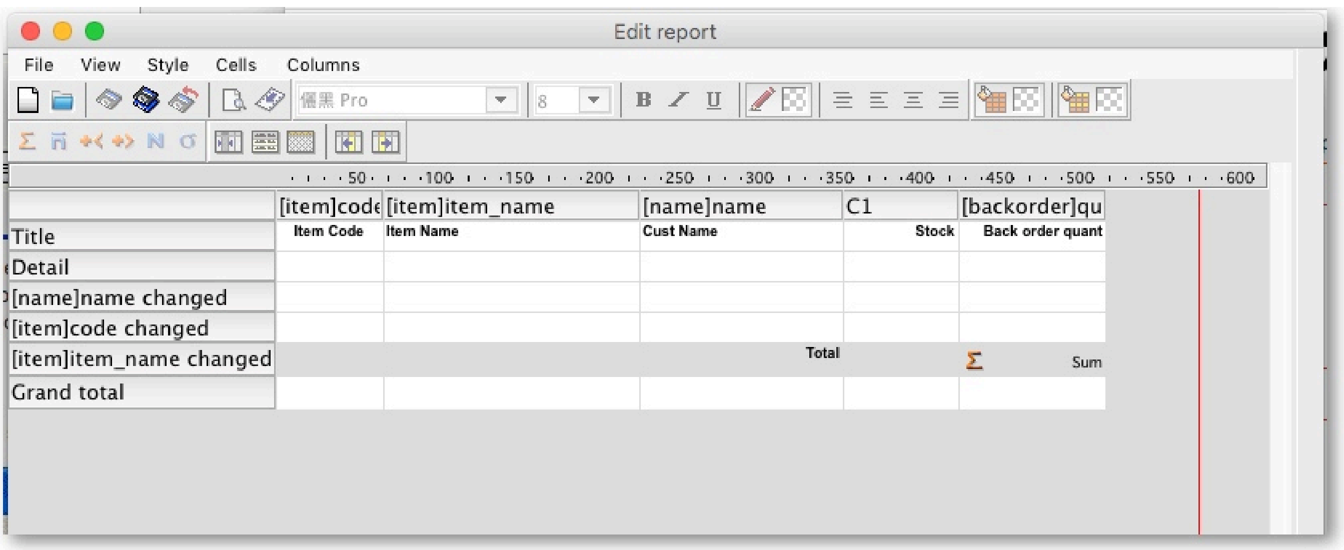
Should one of the built-in reports not quite meet your needs, you have the opportunity to create a duplicate of that report, and then modify it to meet your needs. The first step is to select the closely matching in-built report; in our example we'll use the *expiring_items_date* report, then click on the *Duplicate report* button;



the window that appears has already selected a name for your report, using the name of the in-built report prefixed by “ *my_* ”; you may change this name should you wish. The Permissions drop down list allows you to specify users having access to your report; the options are *All users* , or *Only me* . Should you wish your report to become the default one rather than the in-built report, then check the *Make default* checkbox. When you click on OK, the report you have just created now appears at the foot of the list of reports from the item on the menu Report>Manage reports.

Edit report

The editing of reports using the powerful editor has been extensively covered earlier in this section.

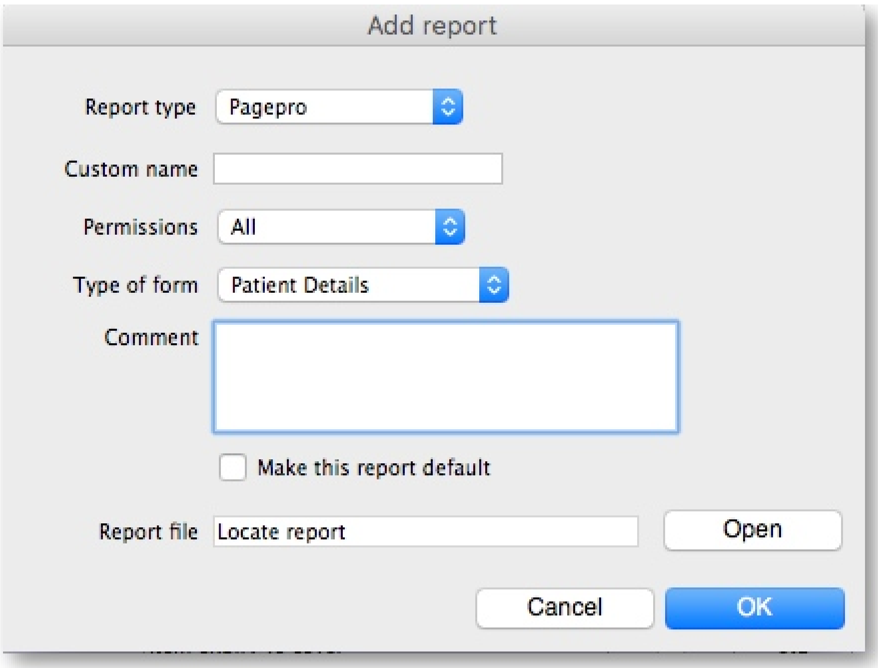


Using the report editor is complex, but it has the potential to produce a wealth of useful information. Contact Sustainable Solutions for a link to download a separate manual on the subject.

Note that in a multi-user installation, changes you make to a report will affect all users, so don't change a report without some forethought.

Add report

Click on this button, and the following window appears



Revert selected reports

This button allows intrepid souls to save face by undoing the damage they have done to a particular report! The report that was installed with mSupply will be reloaded from the disk, and any changes you have made to the version stored with the data will be discarded.

Revert all

This button returns all in-built reports to their original state when you installed mSupply; exercise caution when using it. Custom reports which you have designed are not affected.

Save selected reports

All reports are automatically saved by mSupply in the default folder. There may be occasions when you wish to save one or more reports on a removable storage medium - e.g. a pen drive - and this button allows you to do this; a window appears allowing you to specify the location in which you wish to save the selected reports.

| *Previous: **13.10. ATC and DDD code based reports*** | | *Next: **13.12. Manage reports*** |