1.01. Introduction

Thank you for choosing mSupply. mSupply is now a family of software products, a team of trainers and consultants. Before you launch in (if you haven't already!), we suggest you plan to take the following steps.

- Get a feel for Open mSupply. If you're running a vertically integrated supply chain, Open mSupply will likely work well for you. It is open source (free of charge) and is the product that The mSupply Foundation is prioritising for development. As of February 2025, a proprietary Legacy mSupply Central server is still required at the core of an mSupply installation, but most stores in the supply chain below the 'central' store(s) can be Open mSupply. The plan is to develop all of the central server functionality in Open mSupply.
- Read the rest of this introduction.
- Read the setup, tutorial and licence chapters in this manual.

Please note that installation requires basic computer skills:

- You need to be able to locate a file using the “open” and “save” windows.
- If you are not sure, why not try, and email us if you get stuck.

mSupply is designed to handle the following tasks:

- Recording quotations received from various suppliers in a way that makes for easy comparison of true cost prices.
- Create tenders for suppliers to respond to.
- Ordering (Purchasing) of items from a particular supplier, using actual usage figures to calculate the required quantities.
- Entering of incoming goods into inventory.
- Manufacturing items. That is, building new items from raw materials in your stock.
- Tracking Accounts Payable and Accounts Receivable
- Issuing of invoices for customers, and recording the transaction against inventory.
- Customers are able to order on-line via the internet, and can view stock status and the status of their orders.
- Exporting purchase and invoice data for import into an accounting program.
- Reporting on transactions and other data in almost any manner you want!
- If you need help with installing mSupply please feel free to email us at support@msupply.org.nz

About this user guide

The latest and most authoritative version of this User Guide is located on-line at http://docs.msupply.org.nz/. You can export the chapter you're viewing in PDF format by clicking the **export:pdf** tab to the right. It may then be viewed off-line within Acrobat Reader or other PDF viewer. To obtain the whole user guide in PDF format, visit mSupply site

If you are reading a PDF version, it is likely that a more up-to-date version is available on-line.

The software is under constant development as new features and facilities are added. We

strive to ensure that the user guide and the graphics that it contains reflect these developments, but occasionally you may find that there are differences between the program itself and the guide or its graphics, where the updating of the guide has not quite kept pace with the development of the software. These are usually of a minor nature, but should you have any difficulties, do please send us an e-mail with details of your problem.
It should also be noted that with the considerable range of preferences and user permissions, a particular user's window may have features included or omitted (according to their preferences and their permissions) when compared with the screenshots appearing in the guide.

As mSupply is compatible with both Windows OS and Apple Mac OS, there is a mix of screenshots in the manual taken from each operating system.

About us

Sustainable Solutions was established in 2001 with the primary aim of supplying and supporting mSupply software in developing countries. We are committed to producing software that enables excellence in health care delivery. We take pride in looking after people who choose to use our services.

We have offices in:

- Kathmandu, Nepal
- Auckland, New Zealand
- Dundee, United Kingdom
- Belfast, United Kingdom
- Melbourne, Australia

We can be contacted at:

- email:info@msupply.org.nz
- phone: +977 1 5548021 (Nepal) or +64 225 190 499 (New Zealand)

Please feel free to request more information.

Thanks

- This software grew out of necessity at the Medical Supply Department, Kathmandu, Nepal. We learnt a lot from Jaap Zijp's software “Bhandari”, and from the staff at MSD where *mSupply* was originally developed and tested.
- Ujwal Khatry has stuck with Sustainable Solutions for twenty years, including the startup period where our company name could well have been a misnomer.
- Jim Staples of 4D inc. http://www.4D.com kindly arranged an initial donation of the 4D development environment we use.
- Thanks to those people in the 4D tech mailing list who have helped for no benefit to themselves.
- John Ross, Pharmacist of Patan Hospital, Kathmandu, believed in the quality of mSupply enough

to use it long before it was fully ready
- David Adams kindly donated his superb texts on 4D.
- The moderators of the E-Drug mailing list have been gracious in letting us use that list for occasional announcements.
- Juliet has always been supporting and more through the ups and downs of starting a new organisation.

Copyright

Licence Agreement and Costs

Commercial users or any user wanting multi-user functionality enabled must obtain a licence from Sustainable Solutions.

Please view our web site http://www.msupply.org.nz for up-to-date pricing.

A free version of mSupply is available for Non-commercial use

- You may use mSupply software in single user mode for free as long as it is used:
  - in an approved not-for-profit organisation
  - in a developing country.
- Sustainable Solutions shall be the sole arbiter of those qualifying for free use.
- All users (free and paid) must register with Sustainable Solutions to obtain a registration code. Information supplied will not be used for any purpose other than generation of registration code.
- Users who have obtained a free licence number are not eligible for free support.

Please contact us for quotes regarding customised versions and installation and training packages.

Changes in recent versions

The mSupply version history is available here: http://msupply.org.nz/history

*Previous: **1. About mSupply** | | Next: **1.02. Why mSupply?***

1.05. Terms, definitions and conventions used in this user guide

If you aren't familiar with using a computer, you should read this chapter. We also recommend you work through the 3. Tutorial section of this user guide.

General terms

Menus: choose *New item* from the *Item* menu (sometimes also written as choose *Item>New item*) means click on the word *Item* in the menu bar, then choose *New item* from the menu that drops down.

Keyboard keys: a handful of keys on the keyboard are used extensively and are indicated in *italics*. The most common are: *Tab*, *Shift*, *Ctrl*, *Alt*, *Enter* and *Backspace*.

Field: an area on the screen (usually a white box) where you can make an entry, either text or numbers. In many places, you can use your mouse to hover over a field for a description of what is required.

Typed data: anything that must be typed into a field is shown in `monospace font`. For example: Type `100` and press *Enter*.

Checkbox: a box that changes from having an “X” in it to being blank each time you click in it. To “check” a checkbox means to click it so that an “X” appears (if there is not one already present). Checkboxes have text beside them explaining what the box is for.

Tab & Shift: you can generally move from field to field in a window using the *Tab* key. Holding down the *Shift* key while pressing the *Tab* key will move from field to field in the reverse order to normal. Note that on Windows, some buttons are “tab-able”. That is, pressing the *Tab* key moves the “focus” to a button. Pressing the *Return* or *Enter* key will then activate that button.

Highlight button: pressing the *Enter* key will operate the highlighted button in a window. This is is usually the OK button.

Double-click: in lists (e.g. of suppliers, customers or items), double-click using the left button of the mouse on a line to edit or view more details.

Insertion point: the blinking line in a field that indicates which field is currently accepting typed input.

OK button: can be operated by pressing the *Enter* key.

Cancel button: can be operated by holding down *Ctrl* key (*cmd* on Macs), and pressing the period key (full stop).

Path to a file (or document): a way of describing where a document is stored on your hard disk. It is written as *hard disk:folder 1:folder 2:document*, which is the same as *C:\folder 1\folder 2\document*.

Modifier keys: are different for Windows and Macs. We've tried to list both in the manual, but sometimes one might slip through.

- The Windows *Ctrl* (control) key does the same as the *cmd* (command) key on Macs
- The Windows *Alt* (alternate) key does the same as the *opt* (option) key on Macs.

Column headings: can be clicked to sort the list by that column.

Negative values: are generally not required in mSupply. Even when you are entering returned goods from customers, or returned goods to suppliers, you enter positive values. mSupply automatically converts the invoice total to a negative amount when it is a credit to a supplier or from a customer.

mSupply terms

Basics

Items: Items are the products we manage in mSupply, including medicines, consumables, equipment, laboratory and radiology items or even larger assets such as vehicles and furniture. An item may or may not have stock lines at any given time. For example: In the example data file provided with mSupply, “Amoxycillin 250mg tab/cap” is an item. When you first start to use the example data file it has 2 stock lines. (You can view them under the “stock” tab of the *Item details* window (more on that later!).

Item Lines (or “Stock Lines”): Represent different batches of the same item.

Stock: Represents the physical stock (inventory) in your store.

Stores: Stores are facilities using mSupply (desktop or mobile). Some facilities can run multiple stores. For example, there may be a pharmacy in the emergency department that manages stock completely separately to the main pharmacy – this can be a separate store (if they are using mSupply).

Locations: Locations are places within stores where items are kept. Locations can only exist within a store. A large store like a central warehouse may have several thousand highly specific locations (e.g. A.02.04, B.01.03), while a small store may only have a few locations (e.g. Room 1, Room 2). Items may also be stored without assigning a location: this is common in very small facilities, where items are just stored alphabetically.

People

Suppliers: Suppliers are facilities that a store orders or receives stock from. Suppliers may be external (e.g. private drug companies or wholesalers) or internal (e.g. central medical store, provincial warehouses).

Donors: Donors are external entities who pay for donated stock (e.g. UNICEF, USAID). No donor is entered when the government or medical store is paying in a normal financial transaction. When the donor is recorded, you can track donated items through the supply chain and run donor transaction reports and stocktakes.

Customers: Customers are recipients of items, excluding patients (usually). This includes health centres, hospitals, wards, private clinics and pharmacies, touring medical teams, outreach services and any other entity that an mSupply store issues stock to.

Patients: Patients are individual people who receive items from a prescription. When a store uses mSupply in dispensary mode, patients receive unique ID numbers and we can track their prescription history, allergies, payment history, insurers and notes.

Prescribers: Prescribers are authorised medical professionals who provide prescriptions to patients, which we can dispense in mSupply. Prescribers may include doctors, nurses and other authorised individuals.

Users: Users are the people using mSupply (you!). Each user has their own password and set of permissions (which can vary from store to store). System logs track everything that users do in mSupply.

Transactions and Features

Builds: Builds are transactions that record the manufacturing of an item by turning raw materials into a finished product.

Stocktakes: Stocktakes are physical counts of the stock in your store including all item details, such as the item name, quantity, batch and expiry date.

Purchase Orders: Purchase Orders are used to order stock from an external supplier i.e. a supplier who does not use mSupply (e.g. private drug companies, wholesalers, private pharmacies).

Goods Receiving: Goods Receiving is used to receive stock from an external supplier who we previously ordered stock from via a purchase order. We can then create a Supplier Invoice directly from the goods receipt to add received stock to our inventory.

Supplier Invoices: Supplier Invoices are used to add received stock to our inventory. They are also known as “bills”.

Internal Orders: Internal Orders are used to order stock from an internal supplier i.e. a supplier who does use mSupply (e.g. central medical store, provincial warehouses).

Requisitions: Requisitions show internal orders placed to our store from customers using mSupply. Examples of customers using mSupply include provincial warehouses, public hospitals and health centres. We can create a Customer Invoice directly from the requisition to issue stock to a customer.

Customer Invoices: Customer Invoices are used to issue stock to a customer from our inventory.

Prescriptions: Prescriptions are instructions written by a prescriber authorising a patient to be provided a medicine or medical device. mSupply can record dispensed prescriptions and maintain patient dispensing histories.

Patient Credits: Patient Credits are used to return items from patients and record credits in their favour. mSupply tracks patient credits and applies them to outstanding prescription payments.

Payments: Payments are used to record payments made to suppliers. mSupply tracks outstanding payments from supplier invoices.

Cash Receipts: Cash Receipts are used to record payments received from customers for customer invoices. They can also be used to record patient payments for dispensed items. mSupply tracks outstanding payments owed by customers and patients.

Supplier Credits: Supplier Credits are used to return items to suppliers and record credits in your favour. mSupply tracks supplier credits and applies them to outstanding supplier payments.

Customer Credits: Customer Credits are used to return items from customers and record credits in their favour. mSupply tracks customer credits and applies them to outstanding customer payments.

Cash Register: The Cash Register records incoming and outgoing cash transactions and displays a current balance. mSupply tracks all cash movements and records them here.

Configuration

Visibility: Visibility allows us to control what stores, customers, suppliers and items a user can see when logged into a specific store.

Preferences: Preferences are system-wide settings that apply to all stores and users.

Store Preferences: Store Preferences are settings that apply to specific stores.

Permissions: Permissions are settings that apply to specific users as either individuals or groups.

Previous: ***1.04. Which mSupply package best suits your organisation?*** | | *Next:* ***2. Setting Up mSupply: Technical Guide***

1.04. Which combination of mSupply products best suits your organisation?

Since its creation in 1998, mSupply has grown and multiplied as it has been applied to different challenges. The original Free-user (Windows or Mac based) application continues to be downloaded and used regularly. In fact, it comes packed with (almost) all the bells and whistles of some of our most sophisticated installations, but is only suitable for a small, 'single concurrent user' facility.

Comparison of the mSupply products

So which are the right mSupply products for your organisation?

Free-user

- PC or Mac application - Download here. The database resides on the computer that the application has been installed on. It can be used by only one user at any one time.

- Free! You still need to register mSupply with Sustainable Solutions, but we don't charge you for it - and we don't sell your contact details either!

Single-user

- Same as Free-user, but for users who wish to make use of Support[1] and Up-to-Date (UTD)[2]
- A software license needs to be procured, generally for about 1/3 of the price of a multi-user client, and then Support and UTD on top of that.

Multi-user (Server / client)

- For situations where more than one user needs to access the database at one time. The database is hosted on a file server and mSupply server software is installed on that hardware. Users have access to this data through mSupply client software installed on client PCs that communicate to the server through a Local Access Network (LAN). Remote users can access the server through Remote Desktop Protocol (RDP) or similar.
- A software license needs to be procured for each concurrent client. Support and UTD is optional, but highly recommended. Most of our customers are very happy to pay for these services.

Synchronised Multi-user

- If the internet connection to remote users in a Multi-user configuration is inadequate, then synchronisation allows a Primary - Satellite configuration to be deployed. 'Satellite' multi-user servers are installed at remote sites where users operate mSupply on their local store without worrying about the internet connection. In the background, these 'satellite' servers will synchronise their local store data with a 'Primary' server when the internet connection becomes adequate.
- A software license needs to be procured for each concurrent client for each server. The Synchronisation server Module and Web Server Module are required on the central server.

Synchronised Single-user (Single-user sync)

- There are situations where the remote sites (with poor internet access) are just single-operator stores needing to manage and report their stock using the fully featured mSupply client. Procuring the minimum multi-user satellite server configuration for each of these sites would be expensive. A solution has been developed that entails installing single-user client machines (normally laptops) at these remote locations and then synchronising them to the primary server much like the Synchronised Multi-user configuration.
- Lower cost than conventional synchronised multi-user as the single-user client license is less costly than multi-user client licenses. The Synchronisation server Module and Web Server Module are required on the central server.

mSupply Mobile (Android)

- mSupply Mobile is similar to Synchronised Single-user (Single-user sync), but the users operate with mSupply Mobile (client) software on Android tablets. This app has a reduced feature set, but is more than adequate for most Last-Mile needs. Local stock details are synchronised back

to the Central server, and can be monitored and reported on there.
- Being Open Source software, mSupply Mobile has zero license fees. The Synchronisation server Module and Web Server Module are required on the central server.

Open mSupply

- Open mSupply is the multi-platform mSupply software that has been under development by the mSupply Foundation since 2020. Open mSupply has all of the flexibility of all of the other versions of mSupply with the benefit of being Open source.
- Being Open Source software, mSupply Mobile has zero license fees. The Synchronisation server Module and Web Server Module are required on the central server.

Comparison table

The key differences between the configurations basically comes down to how the user(s) interact with the database. We hope this table helps in making that decision.

Product / configuration	Description	Software price implications - refer Pricing
Free-user	PC or Mac application - Download here. The database resides on the computer that the application has been installed on. It can be used by only one user at any one time.	Free! You still need to register mSupply with Sustainable Solutions, but we don't charge you for it - and we don't sell your contact details either!
Single-user	Same as Free-user, but for users who wish to make use of Support[3] and Up-to-Date (UTD)[4]	A software license needs to be procured, generally for about 1/3 of the price of a multi-user client, and then Support and UTD on top of that.
Multi-user (Server / client)	For situations where more than one user needs to access the database at one time. The database is hosted on a file server and mSupply server software is installed on that hardware. Users have access to this data through mSupply client software installed on client PCs that communicate to the server through a Local Access Network (LAN). Remote users can access the server through Remote Desktop Protocol (RDP) or similar.	A software license needs to be procured for each concurrent client. Support and UTD is optional, but highly recommended. Most of our customers are very happy to pay for these services.
Synchronised Multi-user	If the internet connection to remote users in a Multi-user configuration is inadequate, then synchronisation allows a Primary - Satellite configuration to be deployed. 'Satellite' multi-user servers are installed at remote sites where users operate mSupply on their local store without worrying about the internet connection. In the background, these 'satellite' servers will synchronise their local store data with a 'Primary' server when the internet connection becomes adequate.	A software license needs to be procured for each concurrent client for each server. The Synchronisation server Module and Web Server Module are required on the central server.

Product / configuration	Description	Software price implications - refer Pricing
Synchronised Single-user\\ (Single-user sync)	There are situations where the remote sites (with poor internet access) are just single-operator stores needing to manage and report their stock using the fully featured mSupply client. Procuring the minimum multi-user satellite server configuration for each of these sites would be expensive. A solution has been developed that entails installing single-user clients machines (normally laptops) at these remote locations and then synchronising them to the primary server much like the Synchronised Multi-user configuration.	Lower cost than conventional synchronised multi-user as the single-user client license is less costly than multi-user client licenses. The Synchronisation server Module and Web Server Module are required on the central server.
mSupply Mobile	mSupply Mobile is Open Source software that is similar to the synchronised Single-user configuration, but the users operates the software app on an Android tablets. This app has a reduced feature set, but is more than adequate for most Last-Mile needs. Local stock details are synchronised back to the Central server, and can be monitored and reported on there.	Pricing is even lower than for Synchronised Single-User. This *was* the way forward for the medical supply chain in small and remote facilities - until Open mSupply (see below) took that honour! The Synchronisation server Module and Web Server Module are required on the central server.
Open mSupply	Open mSupply is the Open Source software multi-platform mSupply software that has been under development by the mSupply Foundation since 2020. Open mSupply has all of the flexibility of all of the other versions of mSupply with the benefit of being Open source. Local stock details are synchronised back to the Central server, and can be monitored and reported on there.	Pricing for smaller facilities (single-user stores) is the same as mSupply Mobile. We see this as the way forward for the medical supply chain in both small and remote facilities and in large multi-user facilities. The Synchronisation server Module and Web Server Module are required on the central server.
mSupply Customer Web Interface	Allows staff of Customers in your mSupply system order stock on-line. It runs on a browser on any device: tablet, smartphone, net-book, desktop computer etc. It's a little hard to see why this should be chosen over Open mSupply, as the costs are very similar, without the benefit of being able to operate a store…	Depends on your situation - contact us. The Web Server Module is required on the central server.
FrontlineSMS integration	mSupply has the ability to integrate with a FrontlineSMS installation. This allows a customer to send their current stock levels to mSupply using an SMS (text) message from any mobile phone. This is particularly useful if, for example, you are a mobile or remote health post or dispensary which doesn't have internet access and only needs to send in information about a few items at a time.	SMS module is required on the central server.

Other modules

Other modules are available for addition to the basic mSupply application:

Module	Comments	Software price implications - refer Pricing
FrontlineSMS	Allows users to send their current stock levels to mSupply using an SMS (text) message from any mobile phone - even with only 2G reception!. This can then be used by mSupply to determine how much stock to send to the facility.	Equal to the price of **1** client license.
Product (drug) Registration	Allows integration of product registration (control of what products can be supplied by authorising particular suppliers and products) by recording and tracking the status of supplier's registrations and storing the documentation for easy retrieval.	Equal to the price of **2** client licenses.
Web Server Module	Allows you to access mSupply data on the server from any networked computer that has internet access. This module is a prerequisite for several other modules.	Equal to the price of **2** client licenses.
Synchronisation server Module	Maintains data integrity between a central mSupply server and 'satellite' mSupply servers. It therefore only applies to situations where there is a multi-mSupply server setup. Requires the Web Server.	Equal to the price of **2** client licenses.
Tender Management	Allows execution of a full tender process including publishing of the tender through a web site, and so allowing tenderers to submit tenders on-line. Requires the Web Server.	Equal to the price of **1** client license.

A note about costs...

Software costs

When procuring software, an obvious question is what does it cost. We try to be as up-front as possible about what mSupply software costs. Even so, it's complicated. As you can see above, the mSupply ecosystem is complex and each component has different costs. For a start, we've tried to document the software costs on our pricing page. The amounts that you might pay for mSupply software can be divided into three components:

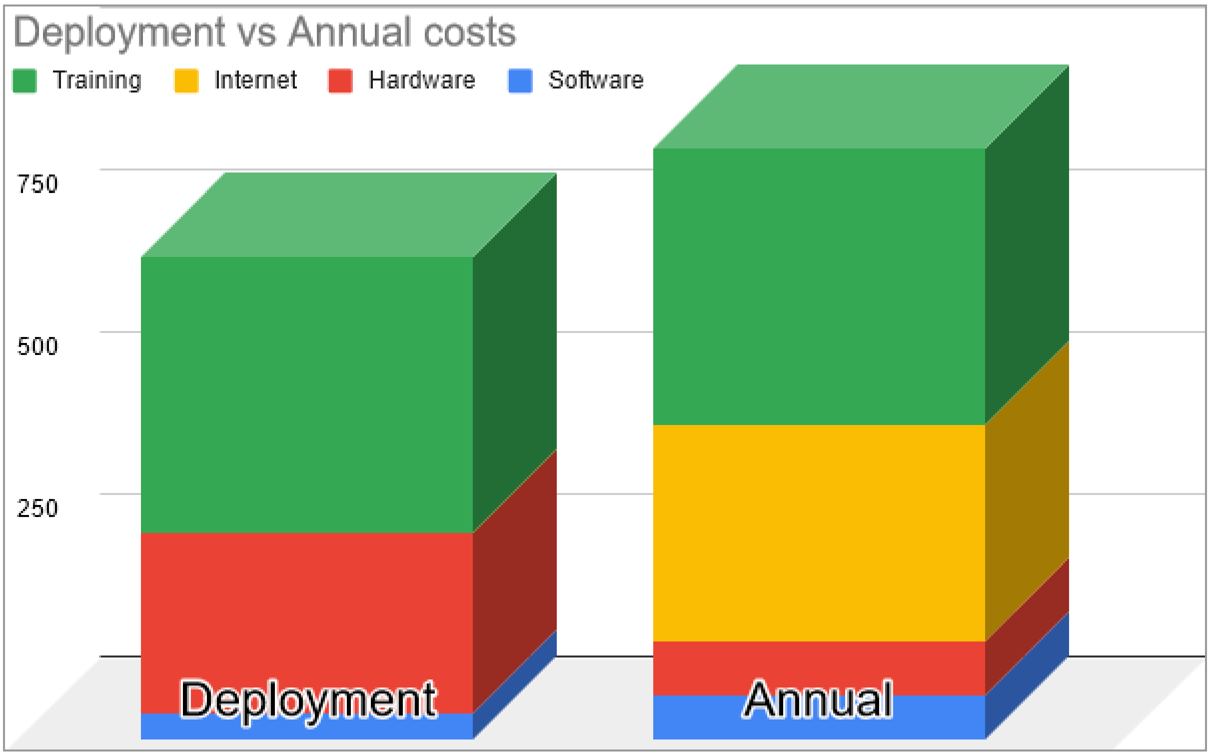
- **License costs** Thanks to the generous support of many donor agencies over the decades of mSupply's existence, only the mSupply products built on the (very good!) 4D database engine incur a license fee, up-front, lasting forever - refer Pricing. Not all of the 4D based mSupply products have a license fee; Free-user is ... free 😉.
  mSupply Mobile and Open mSupply are both Open Source software, and so are **FREE** of licence fees.
- **Installation costs** mSupply systems need to be configured to the needs of the supply chain

system. In principle, software and hardware configuration can be done by system administrators in the host organisation. However, in most cases, the mSupply Foundation is engaged to assist with software and hardware configuration. This is often done initially by one or more consultants travelling to the country for a number of weeks. The costs of this will normally be in the tens of thousands of dollars. Once a country has an mSupply system up and running, additional stores and sites can normally be added at much lower costs, with indicative prices below. For large implementations, local configuration capacity needs to be developed, and the mSupply Foundation is very keen to train local system administrative configuration capacity.
    - Configure a store, not including storage locations and complex user profiles: USD 100
    - Configure hardware:
        - Tablet: USD 25
        - Single-user PC: USD 100
        - Server: USD 200
- **Maintenance costs** As with any technology systems, there are ongoing maintenance costs including keeping software up-to-date[5] and providing support. This support could be provided by system administrators in the host organisation. However, in most cases, it has been found to be more effective to engage the mSupply Foundation to provide support, at least in part. For large implementations, local support capacity needs to be developed, and the mSupply Foundation is very keen to train local system administrative support capacity.
    - For mSupply products that have a license fee, Up-to-date and support is charged as detailed here.
    - For Open source products, support is charged as detailed here.

And all the other costs

Software is *never* the largest component of deployment and operational costs. Local circumstances can vary dramatically, but in one a typical developing country with in excess of 500 mSuppy stores, the experience has been that *after* the expensive initial deployment, deployment and operational costs have been:

Cost type	Deployment	Annual operation
License	0% (Open source)	0% (Open source)
Configuration / Support	5.6%	7.6%
Hardware	37.3%	9.1%
Internet	0%	36.6%
Training	57.1%	46.6%



Note that in this particular country, the annual costs of a the cheapest commercially available cellular internet connection *exceeded* the capital cost of the 10“ Android tablets.

Key conclusions:

- Training is the highest cost (rightly so!)
- Provision should be made for hardware depreciation (devices do break, get stolen, etc.)
- **Software costs are normally < 10% of the costs (capital and operational)**

Referring to the server machine vs. server software

We need two servers!!!???

The ICT industry is plagued by the practice of using the same term to refer to software, hardware or both combined! As it relates to mSupply in multi-user environments, there is often confusion over two of these:

- The term **'Server'** can refer to:
  - The mSupply server computer **software** which runs the mSupply database,
  - The hardware which the mSupply server **software** is installed on, *and*;
  - Both the hardware and the software acting together. This is possibly the most common usage. When we say something like “send to the server” we mean send data to the server software operating on the server hardware.

The server hardware can actually be a cloud hosted 'service' rather than physical hardware that you own and try to manage. Sometimes the server hardware is referred to as a **'file server'**, and this can help to avoid confusion. In any case, for any multi-user mSupply installation, including mSupply mobile, *both* server software and server hardware are needed, and both of them cost money.

- Similarly, the term **'Client'** can refer to:
  - The mSupply client computer **software** which accesses the mSupply server (software) database on the server (hardware),
  - The **hardware** which this client software operates on, *and*;
  - Both the hardware and the software acting together.

Sometimes the client hardware is referred to as a **'client PC'** (Mac or Windows) and this can help to avoid confusion. Again, for any multi-user mSupply installation, including mSupply mobile, both client software and client hardware are needed. For mSupply mobile, the client hardware is an Android Tablet - refer Mobile (Android) user guide v2.0 - featuring offline operation.

We are a software company, so when we use these terms, we will almost certainly be referring to our software, but sometimes not. The context normally helps, but please forgive us if we fail to distinguish between these meanings!

*Previous: **1.03. Who uses mSupply?*** | | *Next: **1.05. Terms, definitions and conventions used in this user guide***

1.03. Who uses mSupply?

This list isn't exhaustive.

All sites are multi-user with the number of sites x number of concurrent users at each site in brackets unless denoted by **SU** (="Single User") after the name.

Our 3 largest users are:

Country	Total Sites	Desktop Sites	Mobile Sites
Myanmar	900	900	0
Côte d'Ivoire	1996	1200	796
Papua New Guinea	447	42	405

Open mSupply installations are in:

- Djibouti
- Timor-Leste
- Mali
- Sao Tome
- with Côte d'Ivoire, Niger, Chad, Republic of Congo all planned for 2025

Africa (16 countries)

Angola

- Went live at CECOMA (their CMS) in September 2023)

Côte d'Ivoire

- Designated national system
- Type of system: **WMS** & **ELMIS**
- As of December 2021: over 700 sites- mixture of desktop and mobile
- 30 sites with World Bank funding from 2021

Djibouti

- Went live at 14 sites May 2023

Democratic Republic of Congo

- Cordaid (3)

Gambia

- Gambia Central Medical Stores (14)

Ghana

- Central Medical Stores (5)
- Status 2015: CMS was destroyed in a fire in 2014, and the project has been on hold since then.

Niger

- 2 regional warehouses managed by Chemonics (SU) - 2020

Nigeria

- Six Government state stores (6 x 3)
- Ten Government stores managed by Axios (10 x 2)
    - Axios HQ, Abuja (4)
    - Axios uses mSupply synchronisation to connect sites that don't have full time internet access. This system has been in use since 2010, and continues to function well.
- FCMS Store, Lagos (5)
- Jigawa CMS

- From March 2016: 20 new users spread over 6 states (Kaduna, Katsina, Zamfara, Kano, Jigawa, Yobe)
- Private non-pharmaceutical supplier, Lagos (STIL)(SU)
- UNFPA warehouse, Lagos (5 users) - 2021

Liberia

- Axios: 1 site synchronising to a central server
- Liberia MoH: 11 sites being consolidated to a single mSupply installation Dec 2016
- using EPI module: yes

Malawi

- Orant Charities (SU). From 2017.
- Nkhoma Hospital Pharmacy Department. From 2015

Mali

- UNFPA Open mSupply pilot, December 2024 onwards

São Tomé and Principe

- Designated national system
- Type of system: **WMS** & **ELMIS**
- National supply chain system (10 users 2021, expanding to 40 users in 2022)

Sierra Leone

- Designated national system
- Type of system: **WMS** & **ELMIS**
- MRC (SU)
- Crown Agents Ebola Response and Free Health care distribution (20) - several stores around Freetown running from a single cloud server.
- National Pharmaceutical procurement unit (2017). Central server with 18 users, 13 regional sites, et al.
- LSHTM Ebovac (2017). Server with 5 users.

South Sudan

- Designated national system
- Type of system: **WMS** & **ELMIS** (expanding to ELMIS H2 2022)
- MoH Central Medical Stores (5 users)
  - Expanding to whole country in 2022
- UNDP Juba (5 users)

Zambia

- Churches Health Association (4 users)

Zanzibar

- ZILS (5 users)
    - this system employs an EDI interface to pick up orders sent to a dropbox folder from the Zanzibar LMIS system and incorporates it into mSupply
    - expanding to Pemba in 2022

Pacific (15 countries)

Cook Islands

- Desktop Sites (5) - 2018
- Mobile Sites (10) - 2018
- using EPI module: yes

Federated States of Micronesia (FSM)

- 7 users at CMS/main hospital - 2012

Kingdom of Tonga

- Central Pharmacy Medical Stores (3)
- Vaiola Hospital (4)
- Haapai Hospital (SU)
- Vava'u Hosptial (SU)
- 'Eua Hospital (SU)
- Mobile (11)
- National Covid 19 vaccination program run using mSupply mobile - 2021
- using EPI module: yes

Kiribati

- Designated national system
- Type of system: **WMS** & **ELMIS** & **Covid Vaccination Record**
- Tungaru Hospital (9)
- ~~3~~ 34 sites using mSupply mobile
- National Covid 19 vaccination program run using mSupply mobile
- using EPI module: yes

Marshall Islands

- Ministry of Health/Majuro Hospital (2)

Nauru

- Central Hospital and Stores (6 users)

Palau

- 3 sites including CMS- went live in 2022.

Papua New Guinea

National Department of Health

- Designated national system
- Type of system: **WMS** & **ELMIS**
- Central server (cloud hosted) with 12 client users
- 28 Sync server sites (Area medical stores (AMS), provincial hospitals) with 118 client users
- 13 Single-User desktop sync sites (district hospitals)
- 105 Mobile sites (Health centres)
- 300 Mobile sites (UNICEF) 2022
- using EPI module: yes

Burnett Institute

- 8 mobile sites (Strive project)

Solomon Islands

- Designated national system
- Type of system: **WMS** & **ELMIS**
- National Medical Stores (14 users + Web server + Tender module)
- National Referral Hospital (4)
- mSupply mobile- 50 Second Level Medical Stores (phased installation from October 2016)

Tokelau

- 3 sites covering country - 2018

Tuvalu

- Princess Margaret Hospital (2)

Vanuatu

- Designated national system
- Type of system: **WMS** & **ELMIS**
- Central Medical Stores (2)
- Vila Central Hospital Pharmacy and Store (3)
- Lenekel Hospital (2)
- Norsup Hospital (2)
- Luganville Hospital (2)
- using EPI module: yes

Fiji

- Designated national system
- Type of system: **WMS** & **ELMIS**
- National deployment to 230 sites started October 2020.
- Aspen Hospitals x 2

Samoa

- Nationwide deployment (approx 18 sites) started July 2020 - completed 2022
- Using mSupply Coldchain for monitoring fridges, including receiving Telegram alerts for breaches.

Niue

- Using mSupply for pharmacy store and all dispensing.
- Using mSupply Coldchain for monitoring fridges

Asia (3 countries)

India

- Meyer Free Clinic

Nepal

- INF (3 sites- SU)
- MSMT (SU)
- Patan Hospital (SU)
- Lal Gadh Hospital
- Gurkha Welfare scheme (26 sites, SU) Funders: DFID, GWT

Afghanistan

- Six NGOs responsible for medicine distribution in provinces synchronise data back to a management server in Kabul (July 2016). Includes automated generation of a multi-workbook Excel spreadsheet that includes macros that submit data to a Ministry of Health database.
- UNDP warehouse (2019- 5 users)
- CMS warehouse (2019- 5 users)
- AFIAT project: 70 sites
- UNCEF : starting to roll out as national system from May 2025

South-East Asia (4 countries)

Cambodia

- World Mate Emergency Hospital
- WMEH Warehouse

Laos

- Designated national system
- Type of system: **WMS** & **ELMIS**
- 186 sites (complete Nation implementation) using mSupply synchronisation

Myanmar

- Designated national system
- Type of system: **WMS** & **ELMIS**
- ~~31~~, no ~~42~~ ~~150~~ ~~362~~ 639 sites using synchronisation to connect to a cloud server, with plans to extend to 3000 sites over the next few years.
- Medical Action Myanmar (Dec 2017) - 25 mobile sites connecting to a cloud server running mSupply.
- UNICEF funded EPI program - approx 350 sites starting 2021
- using EPI module: yes
- Zenith TRI (2022 onwards): another ~40 sites on a separate system serving NGOs

Timor-Leste

Ministry of Health

- Designated national system
- Type of system: **WMS** & **ELMIS**
- Sites
  - SAMES (10)
  - Hospital Nacionale Guido Valedares (5)
  - Dili Central Medical Services (Mobile)

    - 100 mSupply mobile sites (expanding to over 300 in 2022)
    - National Laboratory, Dili & 5 regional laboaratory sites

Menzies Health

- Central laboratory
- 8 remote laboratory sites

Americas (3 countries)

Colombia

- Bogota warehouse supported by Chemonics (2022)
- Valle del Cauca regional warehouse
- Cundinamarca regional warehouse

Haiti

- National warehouse run by Chemonics (2021)
- National Logistics System (2023/24)

USA

- SafeNetRx (was Iowa Prescription drug corporation)
    - users: 2
    - Web server: clients from all over Iowa place orders using the mSupply web interface
    - SafeNetRx are the largest non-governmental supplier of free medicines in the USA.

Europe and the United Kingdom (1 country)

United Kingdom

- UK Microbiological Products supplier (Private company). Since 2012
- UK Med, suppliers of the UK-EMT (Emergency Medical team), responsible for the UK's international emergency medical response.

Previous: ***1.02. Why mSupply?*** | | *Next:* ***1.04. Which combination of mSupply products best suits your organisation?***

1.02. Why mSupply?

This section outlines the approach and ethos of Sustainable Solutions as well as the main areas of functionality that mSupply covers.

People

- Our aim is to serve developing countries with solutions that provide real benefit.
- We are driven by a desire to serve, rather than by profit.
- That said, we are a profitable company with no debt and a commitment to stay in business for as long as we are needed.
- We have a balanced mix of expatriate and Nepali staff who work on mSupply.

Experience

- We've been working on mSupply since 1998, and full-time as Sustainable Solutions since 2001. In that time we've done hundreds of days of training, converted hundreds of thousands of records from other systems to mSupply, and installed mSupply in hundreds of locations.
- Our experience in Nepal, and in many other developing countries, gives us a unique perspective and understanding of the challenges and opportunities involved in working in similar environments.
- We know that a decision to install mSupply is a big one. We're committed for the long term. We're planning to be here decades from now.

Ease-of-use

- mSupply is very easy to install- 10 minutes and a whole department is up and running.
- mSupply uses an easy-to-use graphical interface that makes it a breeze to add purchase orders, patient prescriptions, tenders, etc.
- The system is also made with high-usage warehouses and busy pharmacy departments in mind. he system automates item purchases, receipts and sales for the warehouse administrator, and also provides features such as abbreviated directions entry for quick prescribing of medicines.
- There is always a balance between features and usability. While we know we don’t always get it right, we try to make sure we don’t add features that aren’t really needed. Also, we make sure that features only needed by one client don’t clutter up the interface for everyone.

Stability and reliability

- The initial mSupply server installations in 2002 have run since then without ever crashing.
- We have more than ten years of experience in keeping mSupply installations running in developing countries, so we know what it takes to make a reliable system. All multi-user mSupply systems we have installed are still running.
- mSupply includes an automated internet backup system, so backups are automatically transferred to a remote secure site.
- Server backups are automatic with configurable frequency.

- mSupply keeps a log of every action you make, and if there is a power failure then the log can be used to restore all unsaved data on the server.

Security

- We do not know of any instances of a security breach of an mSupply server
- There is a full password protected login and permissions system, allowing each user's access to functions to be controlled and recorded.
- A user log records all significant user interactions, allowing an audit of which user performed which actions.

Local or Cloud or both!

- mSupply can run in many different ways, depending on whether you want to run a local or cloud-based service:
  - Local server with client connecting over your local network
  - Cloud based server with clients connecting via a special application or a web browser (e.g. Citrix)
  - If you have several sites and want to manage them centrally, but the internet does not support a cloud-based service, then mSupply also supports running individual servers at mulitple locations that then synchronise their data back to a central server when communications are available.

mSupply mobile

- On Sept 2nd 2013 we officially released mSupply mobile. It allows you to run a small medical store using a tablet computer (iPad or Android or Windows). An internet connection is required, but users in developing countries are successfully using mSupply mobile over an EDGE (2g) mobile network.

> As of mid 2016, the internet connection does not need to be there all the time! See Mobile (Android) user guide

- mSupply mobile can give stock visibility and automated replenishment for hundreds or thousands of stores connected to a single server, which may be hosted on your premises or be cloud-based.

Scalable

- The same data file can grow from being used in a single-user system to having hundreds of concurrent users with millions of transactions.

Customisation

- Many mSupply users have unique needs requiring some customisation of the standard mSupply software. mSupply allows customised versions that can still be easily upgraded as new releases are made. Often customisation is done at no extra cost if the client has a current up-to-date contract.

Specially designed for pharmaceuticals

- mSupply is built from the ground up to handle batches and expiry dates.
- There are multiple ways of classifying medicines, and mSupply supports ATC coding, WHO’s EDL[6)] categories and the user’s own custom categories.
- Many of the reports are specific to the needs of pharmaceutical distribution

Reporting

- The in-built reports have been developed since the beginning in response to user requests.
- Users can easily create their own custom reports and save them for use again. Saved reports are available from a menu in the custom report window.
- Items, Names, and transactions all have lots of spare fields that users can use to store custom data, and then use those fields in reports.
- mSupply dashboard allows managers in remote locations to log on with a web browser and view reports.

Mistake tolerance

- mSupply provides easy merging of duplicate items.
- Easy adjustment of inventory errors (but with a full audit trail!)
- Most fields allow entry by name or code, and allow partial entry of as much of the name or code as the user knows.
- Easily find transactions you've entered, by number, by customer/supplier name, by a list of recent transactions or by a custom search.
- If the user’s hardware is powerful enough, fuzzy find searches allow finding data even if the search terms are incorrectly entered.

Backorders

- Items that you are unable to supply to customers are put onto backorder. A report of all backordered items is easily generated. When the stock for the backorder becomes available a customer invoice is automatically created awaiting your confirmation.

Web interface for customers

- mSupply allows customers to remotely log in via a web browser and place orders, view order status, stock status and transaction history. This system is in daily use.

Customer stock history / indent ordering

- mSupply supports a unique system of centralised supply where the distribution point submits current stock on hand figures, and mSupply calculate a rational quantity to supply, knowing the historic stock on hand, the ordering cycle, and the amount supplied during the previous cycle.
- mSupply also supports the simpler imprest system where the amount given to customers is based on a fixed level of stock, as is commonly done when supplying wards in hospitals.

Quantification

- mSupply uses a powerful ordering system that allows accurate real-time analysis of how much stock should be ordered, based on historic consumption, order lead time, the ordering frequency, desired “buffer” stock levels and current stock levels. Unmet demand from customers, backorders, and stock on order are also taken into account.
- This system has proven reliable, and requires little user intervention, unlike systems that require you to set minimum and maximum stock levels. mSupply still allows minimum stock to be set if really needed.

Procurement

- mSupply handles purchase orders in multiple currencies, and allows split deliveries.
- The goods receipt module allows full or partial receipt of each purchase order plus addition of stock not ordered.
- Ad hoc quotes from suppliers can also be handled.
- The quantification, tender management and purchase order systems all tie together so data flows from one to the other without requiring re-entry.

Tender management

- The Tender Management module provides detailed production and management of tenders including using mSupply data to determine quantification, printing invitation letters, comparing tender submissions and automatically producing Purchase Orders for the winning tender supplier.
- The Remote Tender Management Module provides posting of tenders by suppliers to https://tenders.msupply.org.nz secure web site. You download and automatically import completed tenders to mSupply for easy comparison of supplier responses, choosing the winning supplier and creation of purchase orders.
- Supplier Registration functionality is planned to be developed as part of the Tender management module.

Dispensing

- mSupply integrates well into hospital pharmacies, providing easy breakdown of bulk packs for dispensing.
- Prescribers are recorded, and prescriber reports allow analysis of prescribing trends and costs.
- Drug interactions are handled, as is repeat dispensing.
- Patient history is recorded and easily accessible.

- Customisable abbreviations allow rapid entry of patient instructions on to printed labels.
- Medicine labels are produced using specialist label printers. Busy sites using mSupply produce hundreds of thousands of labels per year.

Multiple sites from one server

- mSupply is able to handle multiple virtual stores within a single data file. A common use for this is a hospital, where several stores may be present, but each needs to run independently.
- Stores can run in either dispensary or store mode, so one server can handle both a hospital pharmacy and a warehouse store simultaneously.
- Using Citrix and a DSL internet connection you can run a whole country's medical distribution system from a single server, greatly reducing infrastructure requirements while dramatically improving availability and reliability.

Stock control

- Because mSupply tracks each batch separately, full FEFO [7] can be maintained for every item.
- There is a full audit trail for each stock line.
- Each stock line has a record of warehouse location, enabling easy warehouse management
- If stock lines have the same batch number, expiry and pack size, they can be split and combined.
- Stock lines can be re-packed to different pack sizes for convenience. Warehouses will find it easier to handle cartons with a pack size of, say, 12,000 tablets while dispensaries will be dispensing individual tablets, and so will want a pack size of 1.

Warehouse management

- Full Location management
    - mSupply allows volume based calculations of available storage, that is especially critical for cold chain items.
    - Volume information is used to provide either reports or a graphical depiction of how full each section of the warehouse is.
    - Alerts are given when placing purchase orders if there will not be enough space to hold the incoming goods.
- Basic bar-coding functionality is planned to be developed soon.

Vaccines monitoring

- mSupply allows recording of VVM[8] status for batches, and allows sorting available stock by VVM status rather than by expiry.

Mobile communications

- mSupply integrates with Frontline SMS to provide an interface for using SMS messaging to submit information such as stock levels and goods receipt confirmations to mSupply.

Hospital information system

- A simple hospital information system has been developed as part of mSupply. It is designed to provide a basic service to record critical data:
    - Recording a hospital's wards and beds.
    - Recording inpatient admissions (admitting a patient, assigning them to a ward and bed).
    - Recording ICD[9] 10 disease codes for each patient admission. You can assign multiple disease codes, and prioritise them (primary, secondary, etc..).
    - Moving patients to different wards/beds.
    - Recording discharge data (patient status at time of discharge)
    - Reporting on bed occupancy rates as a whole and by ward, and other useful statistics e.g. average length of stay, ICD10 statistics.
- The mSupply HIS is a cost effective alternative to large commercial installations.

Product / medicine registration

- mSupply's Registration module allows mSupply to manage registration of suppliers and their products on a per brand, dose, and form basis.
- mSupply will record and track the status of supplier's registrations and stores the documentation for easy retrieval.

No data lock-in

- All data in mSupply can be exported as industry-standard XML or as an SQL dump, allowing use by other systems as needed.
- A public API has been developed, allowing any system to retrieve and submit information from/to mSupply.

Cross-platform

- mSupply is available for Windows and Macintosh.
- We recommend Windows servers, but client computers can be either Windows or Macintosh.

Interaction with other systems

- mSupply can either query other systems or provide data in real time via XML web services and other industry standard connectors.
- mSupply provides automated seamless integration with Moneyworks accounting software and general export files which can be easily customisable for import to other systems.

All of these features combine to make a very powerful medical inventory supply chain management system which has been tried and tested in dozens of locations around the world. We believe it has a unique set of features that no other product offers for managing medical supplies in developing countries

For full information, visit http://www.msupply.org.nz A demo version is available here

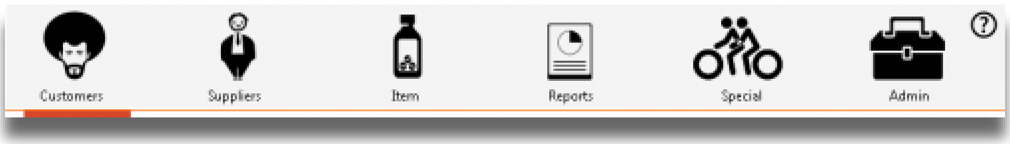
The home page for the documentation wiki is here

*Previous: **1.01. Introduction** | | Next: **1.03. Who uses mSupply?***

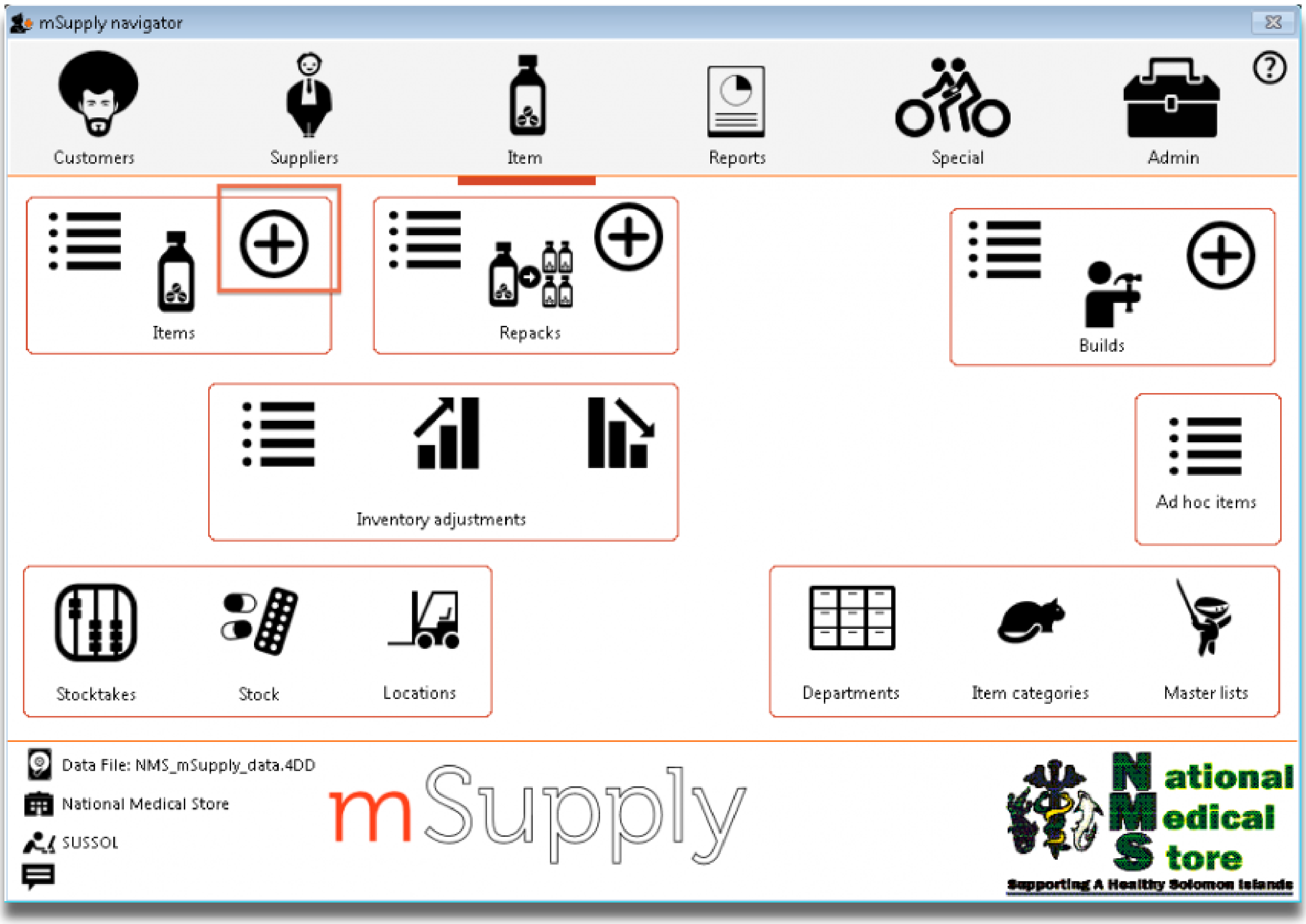
3.05. Creating and viewing items

Creating a new item

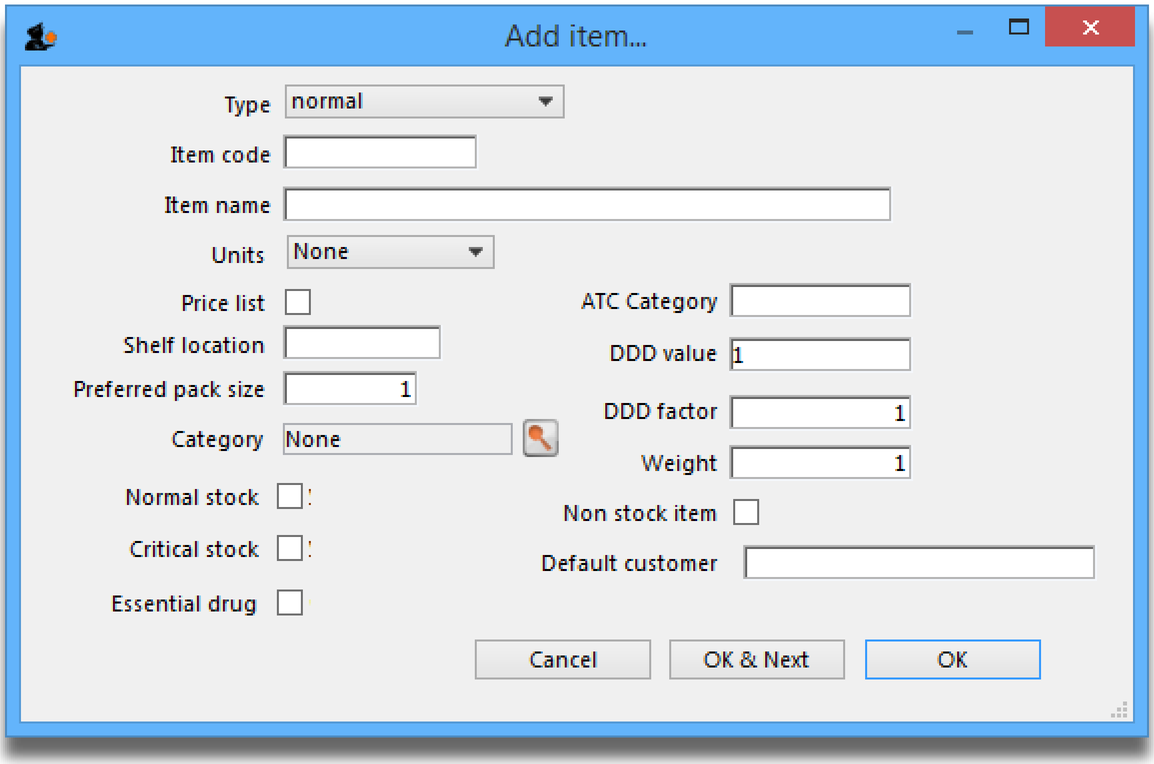
In this section of the tutorial, we are going to add two new items to our mSupply database. From the navigator's opening screen, click on *Item*, the 3rd large icon on the top of the screen.



The following screen appears:



Click on the *New item* icon (the large "+"). You are presented with a window with a number of fields to enter:



Below is a list of fields and the text to be entered into each field. You can use *Tab* to move from field to field or, using the mouse, click on the field you want to edit.

- **Type:** The default entry *normal* is shown in the drop-down list and should not be changed.
- **Item code:** Enter `amo500c`.
- **Item name:** Enter `Amoxycillin 500mg tab/cap`.

If you make a mistake, you can click in a field and edit the value.

- **Units:** The default entry is *None*. The options are: *unit*, *ea* (for each), *gm* and *ml*.
- **Price list:** Click in the box so a check appears in it. This means that when we export a price list, the price for this item will be included.
- **Shelf location:** Enter a3. Amoxycillin is stored on shelf 3, section a of our imaginary store. Note that "A" is interpreted differently from "a", so it is important to be consistent and use all upper case or all lower case letters for shelf locations.
- **Preferred pack size:** Enter `100`. This means we want a 100-unit pack to be our standard for comparing prices of this item.
- **Category:** If a list of categories has been defined, this field allows the item which is being added to be placed in its appropriate category.
- **Normal stock, Critical stock, Essential drug, ATC category, DDD value, DDD factor, Weight, Non stock item, Default customer:** For this tutorial, ignore these fields and leave them blank.
- Click the *OK & Next* button to add this item to mSupply. The window's fields will clear allowing

you to add a further item.

If you have no more items to add, click the *OK* button. If you accidentally click *OK & Next* and then want to exit, just click the *Cancel* button. The Amoxycillin 500mg tab/cap would still be entered, as it was saved when you pressed the *OK & Next* button.

Proceed to add a further item with the following details:

Field	**Enter….**
Item code	`amo125s`
Item name	`Amoxycillin 125mg/5ml syrup`
Units	`mL`
Price list	check the checkbox
Shelf location	`a7`
Preferred pack size	`60`

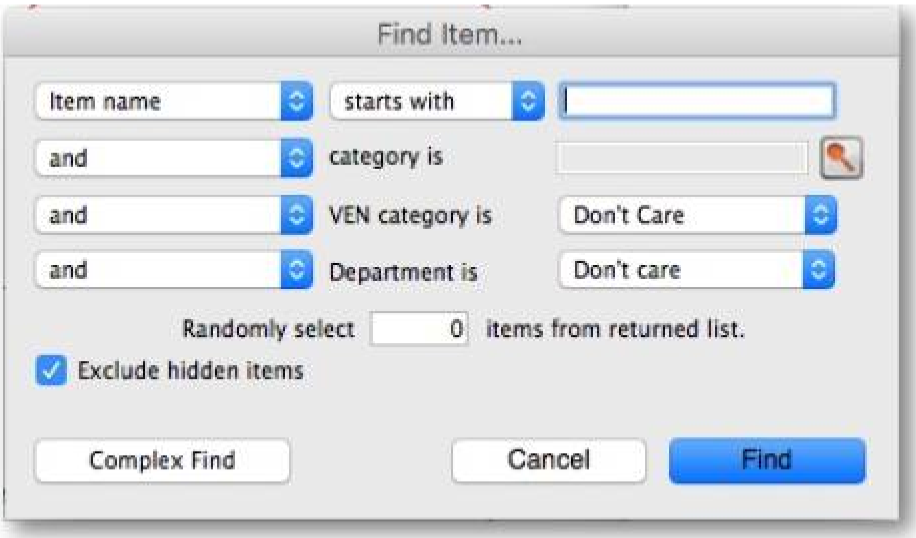
Click *OK* now that you have added the item, then click *Cancel* to exit the window.

Congratulations! You have now added 2 items to our example data file. Let's go and see how to find them.

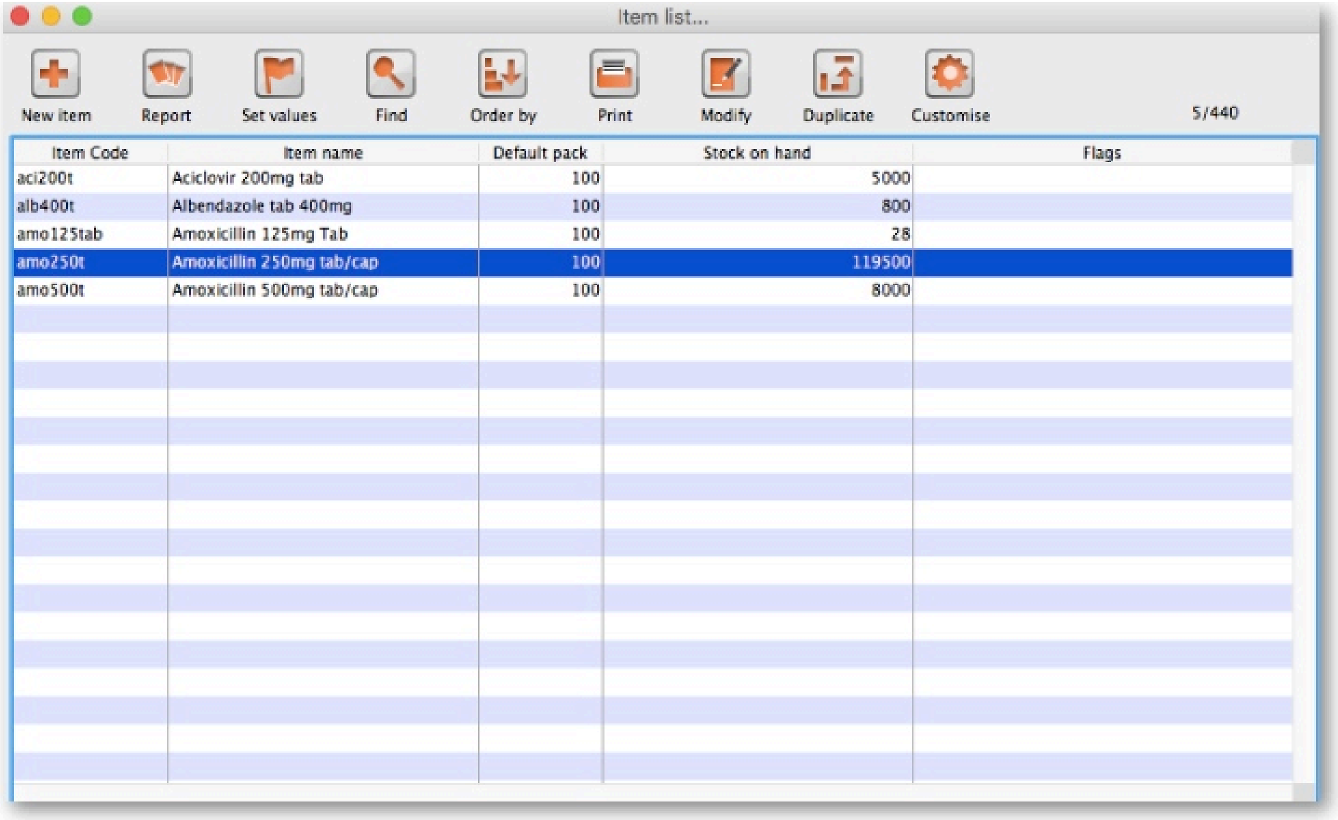
Viewing item details

Click on *Show items* from the navigator's Item panel.

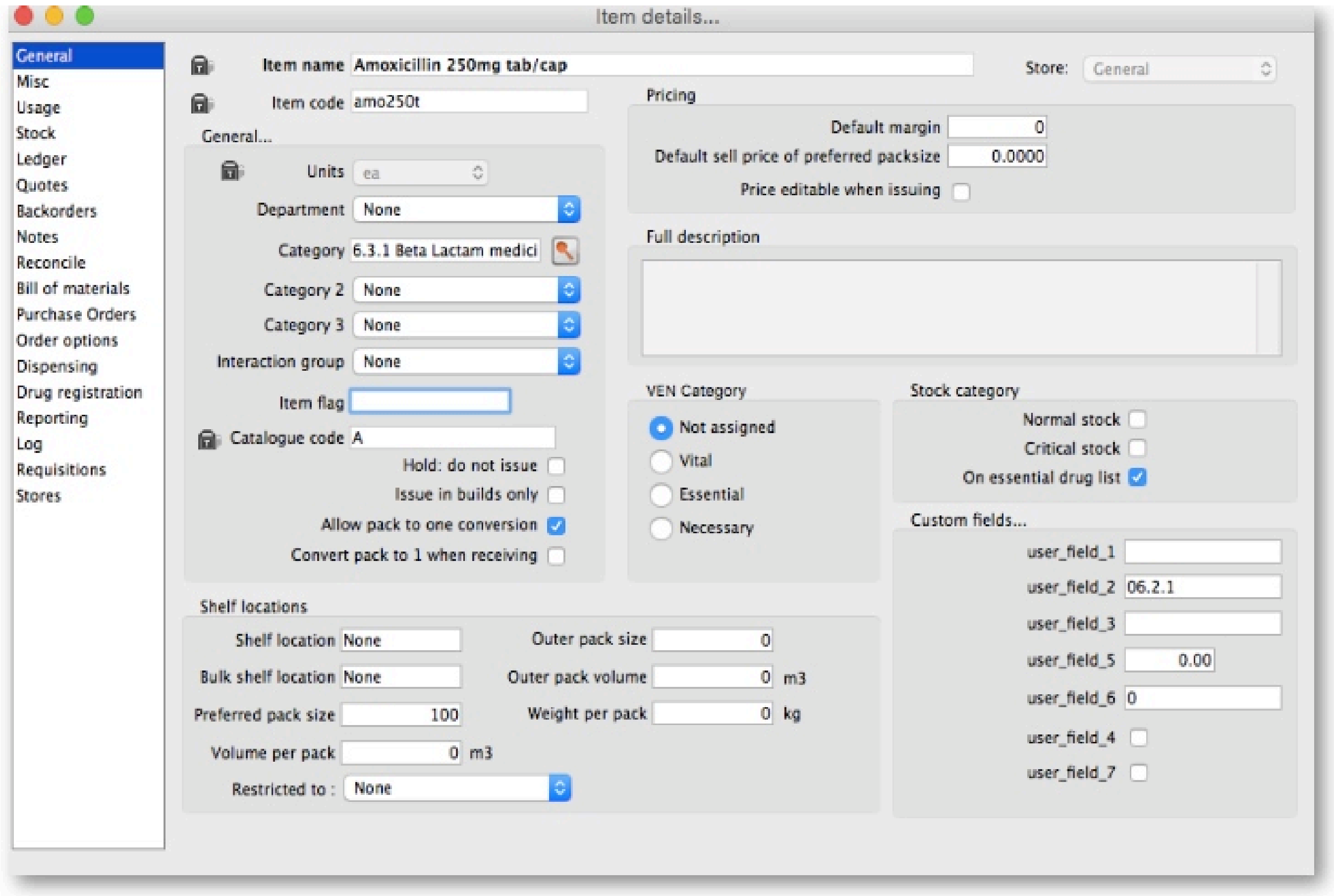
You will be presented with a window to find items:



Type a into the text entry area, then click the *Find* button. A list of all the items whose name or code starts with “a” is shown.



We will choose the Amoxycillin 250mg tabs/caps - an item that was already in the example data file. To choose the item, double-click anywhere on its line in the window. You will now see a window that displays a lot of information about “Amoxycillin 250mg tab/caps”. You can see stock on hand, view and edit supplier quotations, view usage for the last 24 months, view backorders, and read and edit notes.



At this stage, we only want to know how to view the information. For an explanation of all the information displayed see 4.01.01. Items - General tab. When you have finished viewing the information, click the *OK* button to return to the list of items.

If you want to view a different item, you can double-click its line. Otherwise, click the *X* button in the top right corner (on Windows) or the top left corner (on a Mac) to exit and return to the navigator screen.

Previous: ***3.04. Navigator*** *| | Next:* ***3.06. Customers and suppliers***

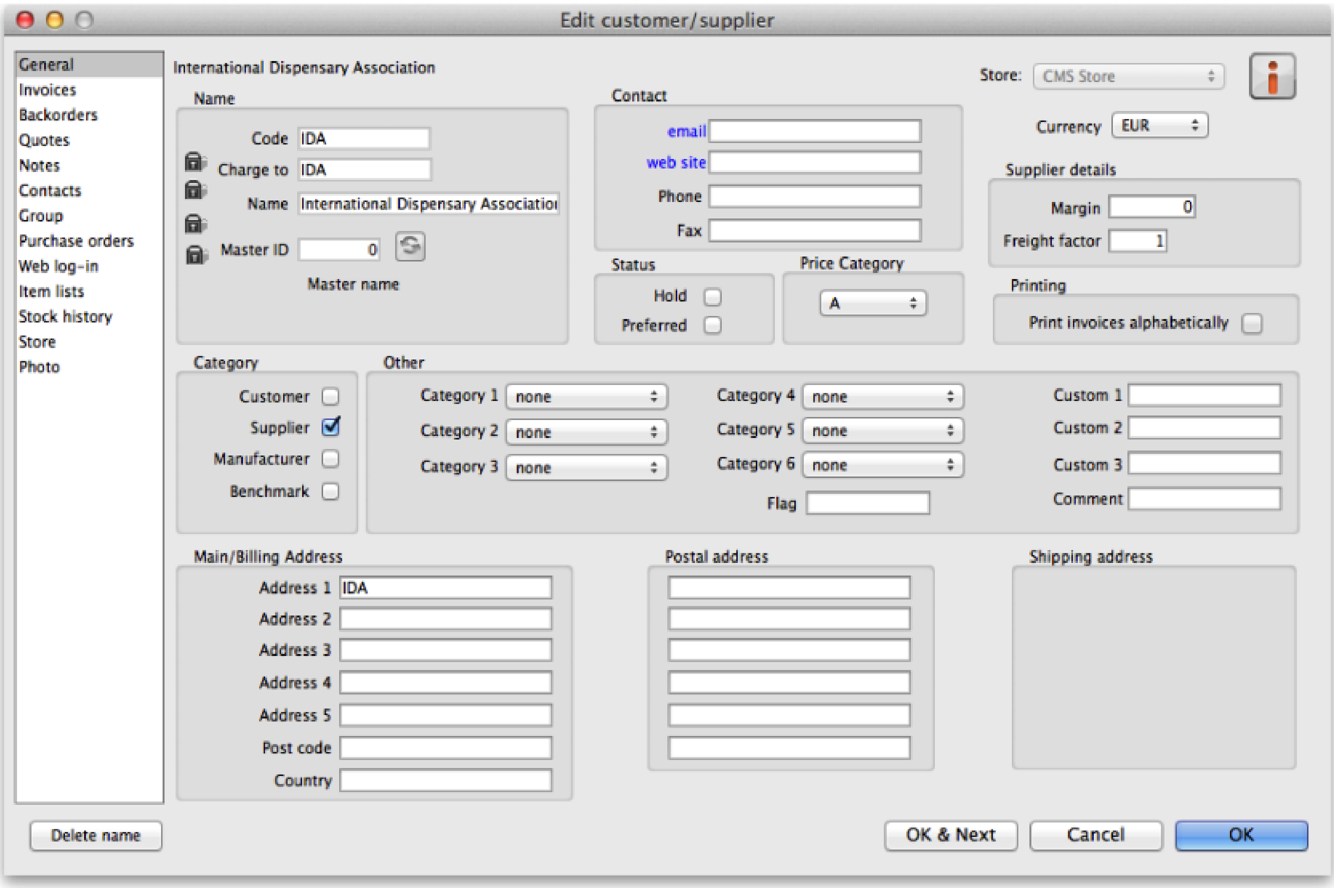
3.06. Customers and suppliers

Adding a customer or supplier

In this section of the tutorial, we will add a new supplier and a new customer.

Adding a supplier

From the top of the mSupply navigator screen, click on the 2nd of the large icons, *Suppliers*, and then click on *New Supplier* from the navigator panel. You will see this window:



You can enter the details for your new supplier in this window.

Field	**What to do....**
Name	
Code	Enter “Acmep” to identify the Supplier (Acme Pharmaceuticals). You need to choose a unique code for each name. Try to choose a logical system, as the code is used to look up the Supplier (or Customer) when you are entering invoice data. (for example, try to start the code with at least the first three letters of the Supplier name)
Charge to	Enter “Acmep” again. This field is only used when exporting data to an accounting program - this code must match the code you use for the supplier in your accounting program.
Name	Enter “Acme Pharmaceuticals” - the name of our supplier.
Master ID	Ignore for now
Contact	
Email, Web site etc.	Fill in with the appropriate details
Status	
Hold checkbox	If this box is checked for supplier or customer, that particular supplier or customer can neither supply nor be supplied with items.
Preferred checkbox	Leave unchecked
Price Category	
Price Category	This applies to customers. It is possible to assign multiple sell prices to customers. Leave it set to “A”.
Currency	

Field	What to do….
Currency	The field is automatically filled in with “Nrs” (=Nepali rupees - the default currency in our example data). This is the currency that this supplier will use to bill us.
Supplier details	
Margin	Enter “10”. Items purchased from this supplier will have a 10% margin added to calculate the selling price.
Freight factor	Enter “1”. Acme Pharmaceuticals does not charge any freight to us. Their prices are “CIF”(Cost, Insurance & Freight to named port). This field is only used for comparing quotations from suppliers - it is not used for actual invoices.
Printing	
Print invoices	Ignore for now
Category	
Customer check box	Leave this box unchecked, as we are entering a new Supplier.
Supplier check box	As you chose “new supplier” this box is already checked.
Manufacturer	Leave unchecked
Benchmark	Leave unchecked
Other	
Category 1-6	Ignore for now
Custom 1-3	Ignore for now
Flag	Ignore for now
Comment	You can enter a brief note here (Ignore it for now)
Addresses	
Address, Main, Postal and Shipping address.	You can complete these with appropriate values.

If you are satisfied with the details, click *OK*. You will be returned to the mSupply navigator screen.

Adding a customer

From the top of the mSupply navigator screen, click on the 1st of the large icons, *Customers*, and then click on *New Customer* from the navigator panel. You will be presented with a window similar to the *New Supplier* one above to enter the customer's details.

Fill in the fields as follows:

Field	What to do
Name	
Code	Enter “bluec”
Charge to	Enter “bluec”
Name	Enter “Blue Cross Hospital” - the name of our customer.
Master ID	Ignore for now
Contact	
email, web site, etc.	You can complete these with appropriate values.
Status	

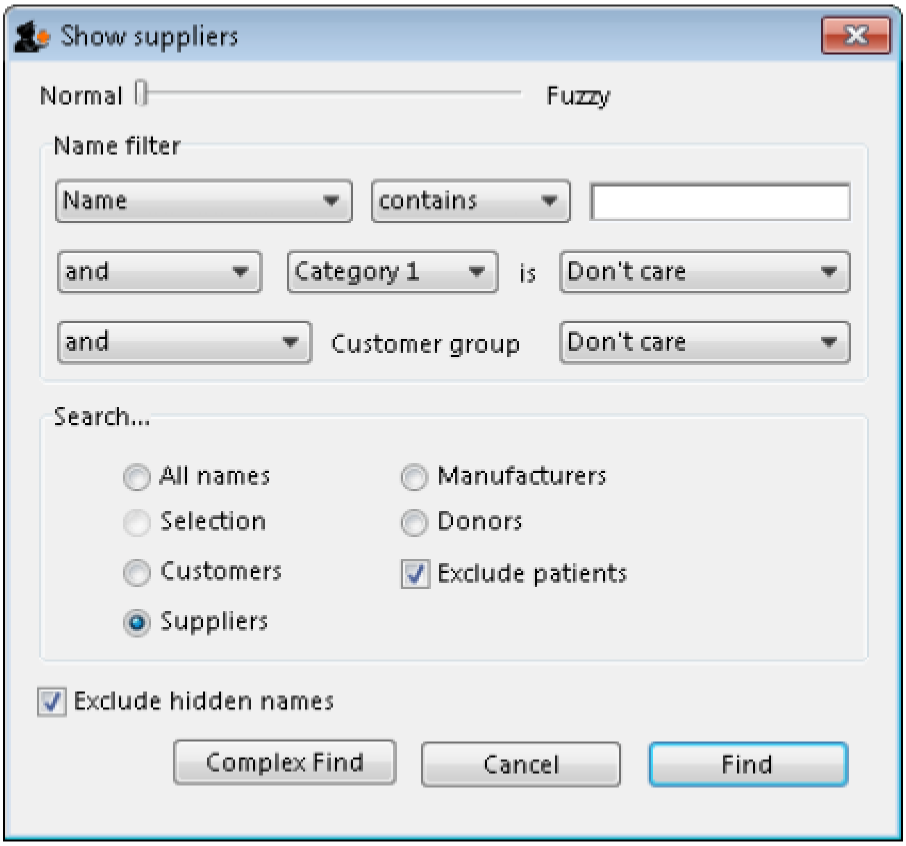
Field	What to do
Hold checkbox	If this box is checked for supplier or customer, that particular supplier or customer can neither supply nor be supplied with items.
Price Category	
Price Category	This applies to customers. It is possible to assign multiple sell prices to customers. Leave it set to “A”.
Category	
Customer check box	As you chose “new customer” this box is already checked.
Supplier check box	Leave this box unchecked, as we are not entering a new Supplier.
Manufacturer, Benchmark check boxes	Leave these unchecked too
Other	
Category 1-6	Ignore for now
Custom 1-3	Ignore for now
Flag	Ignore for now
Comment	You can enter a brief note here (Ignore it for now)
Print invoices	Ignore for now
Addresses	
Address, Main, Postal and Shipping address.	You can complete these with appropriate values.

Click the *OK* button to save the details and exit the window.

Editing a customer or supplier

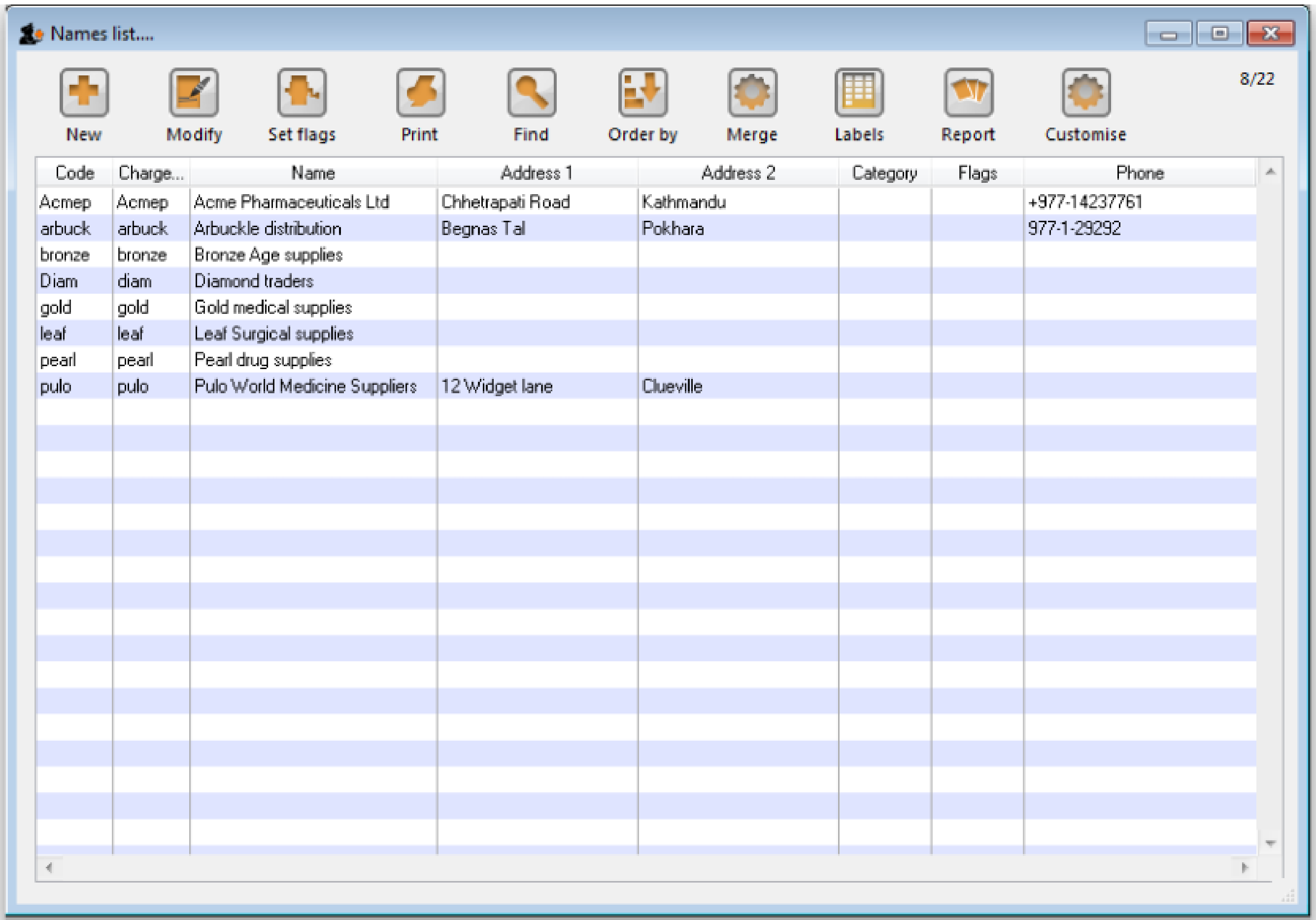
Let's now look up Acme Pharmaceuticals.

- Choose *Show suppliers* from the navigator's *Supplier* panel. You are presented with a window to enter as much of the supplier's name or code as you know.

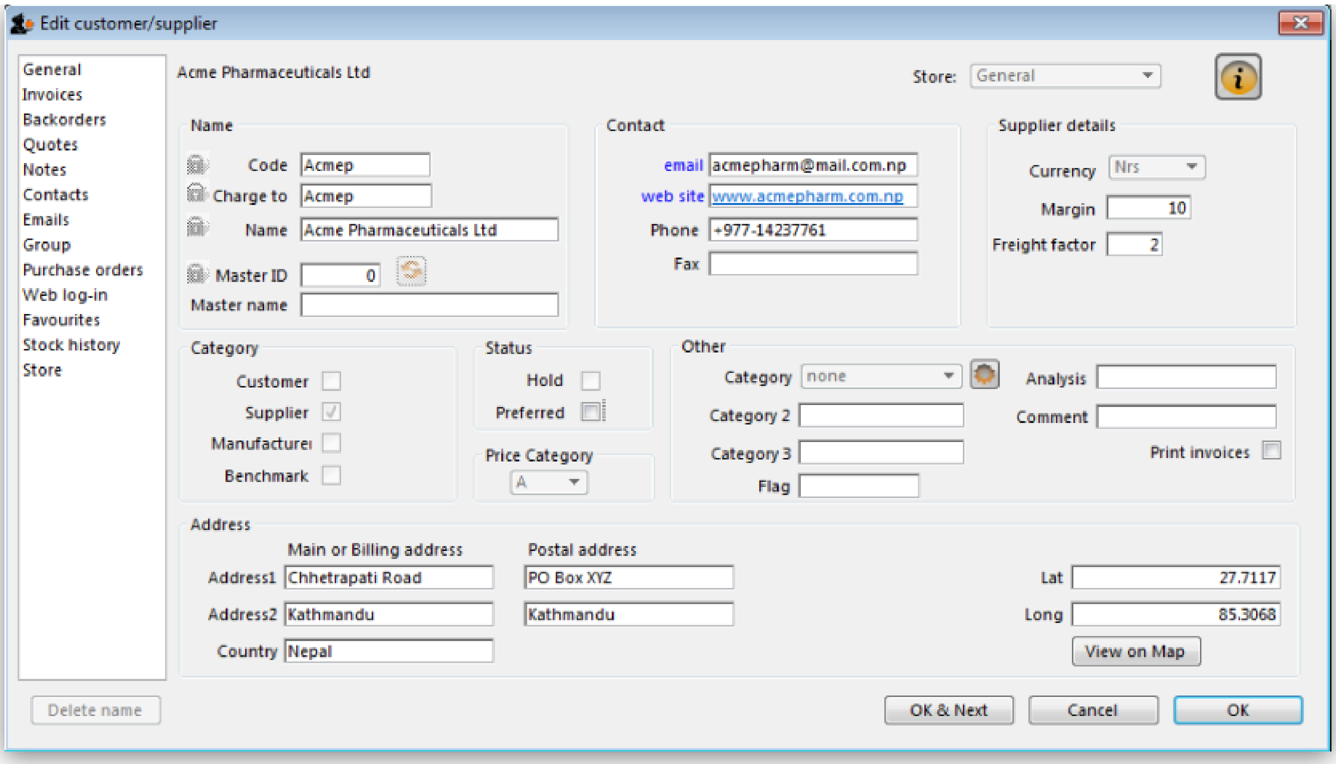


For information on the Normal - Fuzzy slider, see Editing a Customer, Supplier or Manufacturer

For this tutorial, just click the *Find* button. You will get a list of all suppliers.

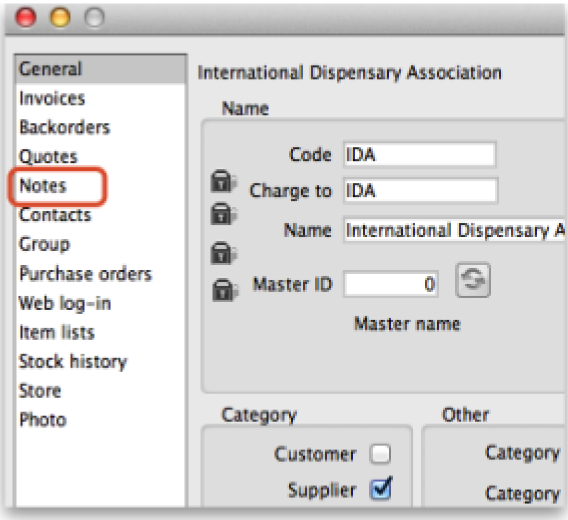


- Double-click “Acme Pharmaceuticals” entry in the list. You will be shown the same window the same as you used to add Acme Pharmaceuticals as a new supplier.

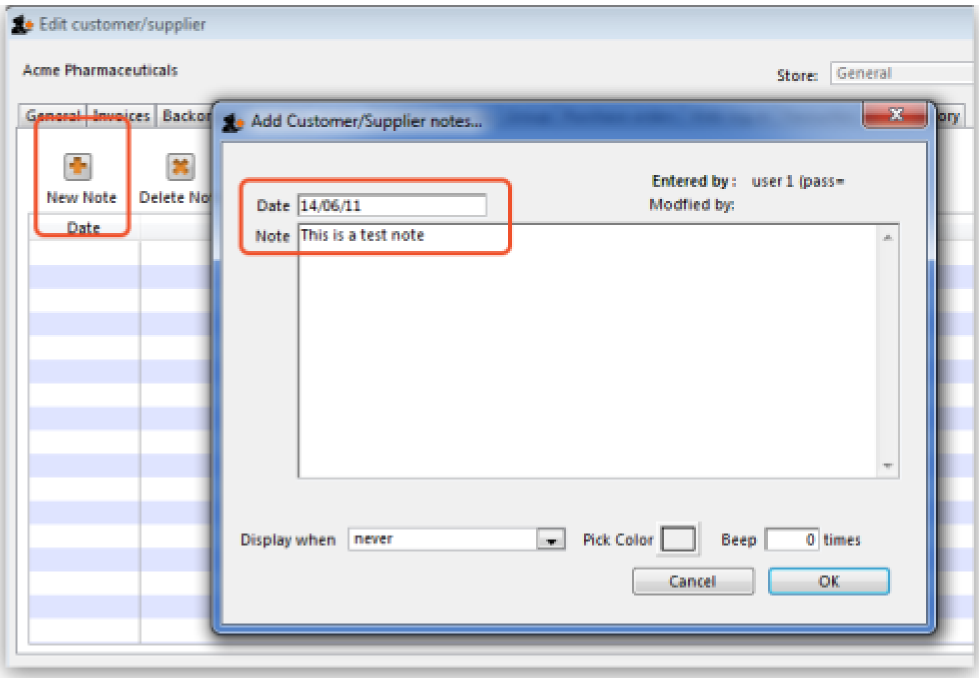


- Note the window has Tabs down the left side in the sidebar: General, Invoices, Backorders, Quotes, Notes, etc. Let's add a note for Acme pharmaceuticals:

- Click on the *Notes* tab.



- Click on the *New Note* button. Today's date is entered automatically and highlighted. Click inside the Note Entry field.
- Enter `This is a test note` then click the *OK* button.



- The first line of your note text will appear in the list of notes.
- Click *OK* to exit viewing/editing the Acme Pharmaceutical supplier, then click *OK* again to exit the list of suppliers.

*Previous: **3.05. Creating and viewing items** | | Next: **3.07. Viewing Names in Google Maps***

3.01. The tutorial like no other

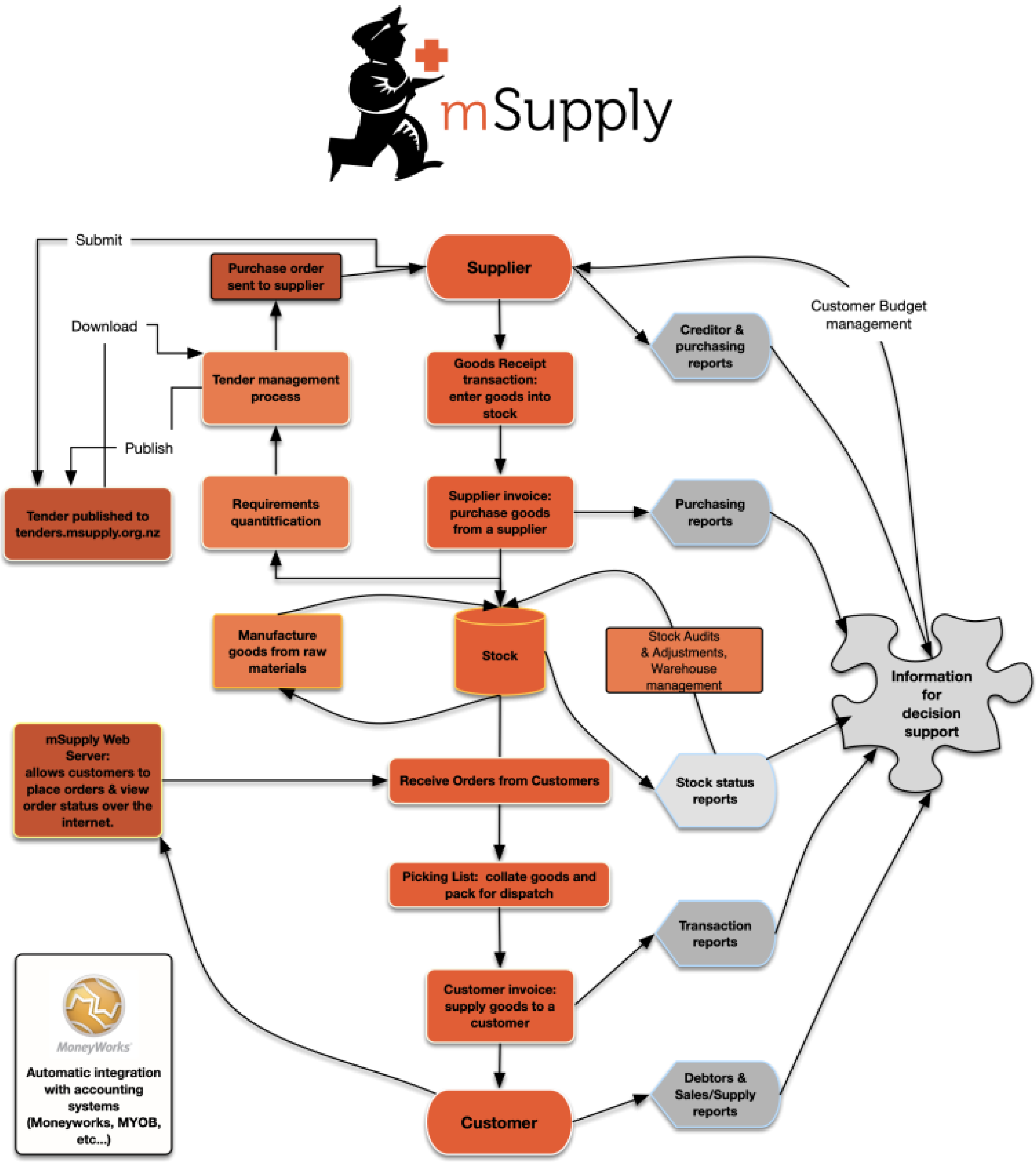
For a glossary of terms please refer to section 1.05. Terms, definitions and conventions used in this user guide

Only mSupply®'s basic features are covered in this tutorial. The enhanced features are covered in-depth in later sections of the user guide.

mSupply explained

This chart shows the common steps in most pharmaceutical supply processes. The manufacturing step only applies to manufacturers.

mSupply work flow diagram



The two most common transaction types in mSupply are the **supplier invoice (si)** and the **customer invoice (ci)**. These transactions record stock purchases from suppliers, and stock supplies to customers respectively. mSupply records stock adjustments through these two transactions. So, given an opening balance of stock, mSupply will show a series of transactions that result in the recorded closing stock.

Of course, there is much more to it than that, but these two transactions are the core of the system.

Note that mSupply has dozens of preference settings (**File>Preferences**) which change the behaviour of many aspects of the software. If you have changed the preferences from their default settings, some parts of this tutorial may not be as stated below. To work through the tutorial, we recommend you start with a fresh copy of the example data to ensure the preferences are set correctly.

Before starting the tutorial, you will need to have installed mSupply and opened the example database. If you haven't done so, see section 2.02. Installation.

mSupply runs best with a screen resolution of 1024 x 768 or greater. If you have your screen set to 950 x 850 or lower, some windows will not fit on the screen. To change screen resolution:

- Windows: right-click anywhere on the desktop, select **Properties** > **Settings**, and make the necessary changes.
- Macintosh: Choose **Apple** > **System Preferences…** then click on the **Displays** icon and set a new resolution

*Previous: **3. Tutorial** | | Next: **3.02. Logging in***

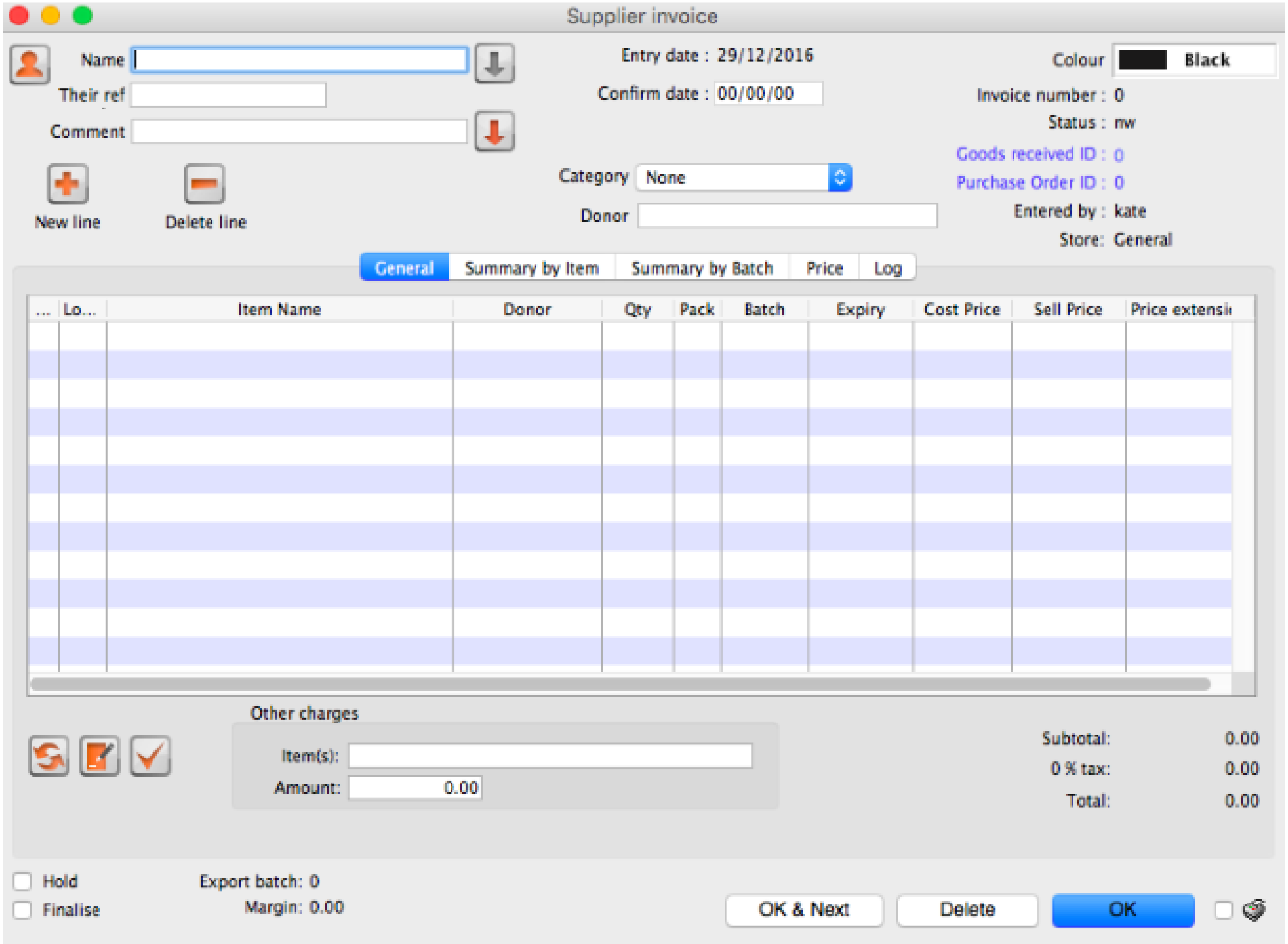
3.08. Enter incoming goods (supplier invoices)

In some countries, an invoice for incoming goods is referred to as a “bill” - in mSupply we use “supplier invoice” to mean the same thing.

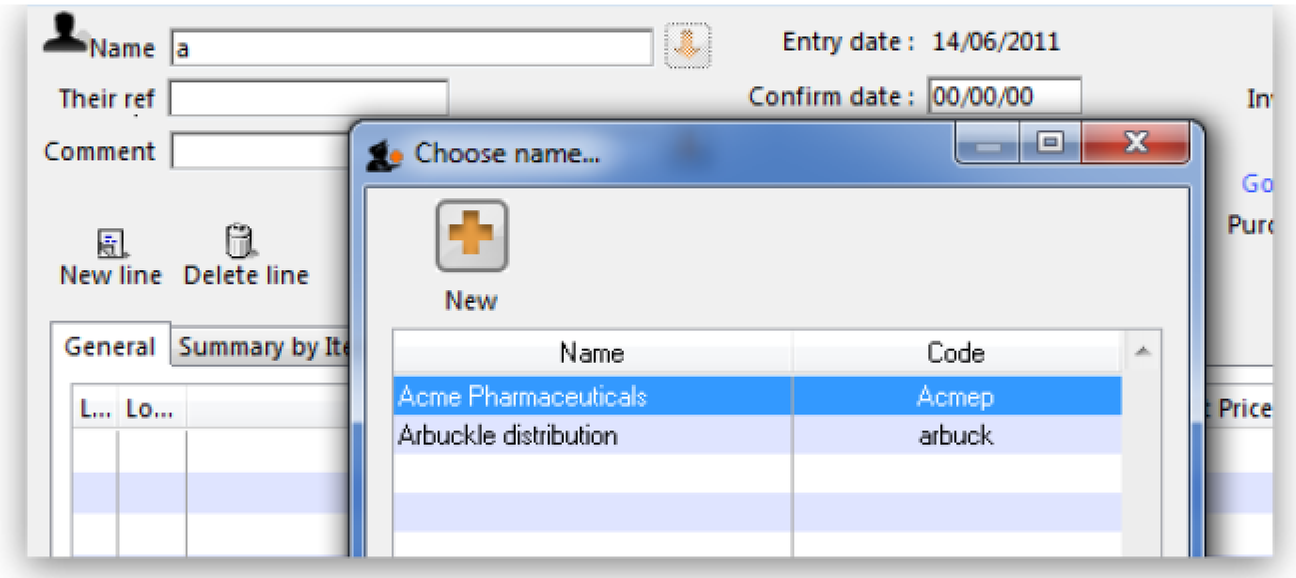
Let's suppose we have just received a shipment containing two items from Acme Pharmaceuticals, and we want to enter these goods into stock. The invoice looks like this:

From: Acme Pharmaceuticals Bill: no.A939						
Item	**Quan**	**Pack**	**Batch**	**Expiry**	**Price**	**Extension**
Amoxycillin Caps 250mg	1000	100	b93333	31/12/2015	344	344,000.00
Cotrimoxazole 240mg/5mL susp	65	60	bb23d	31/10/2015	21	1,365.00
Cotrimoxazole 240mg/5mL susp	100	60	bb22d	31/01/2016	21	2,100.00
					Total:	347,465.00

Choose *Supplier>New invoice* from the menu or mSupply navigator screen.



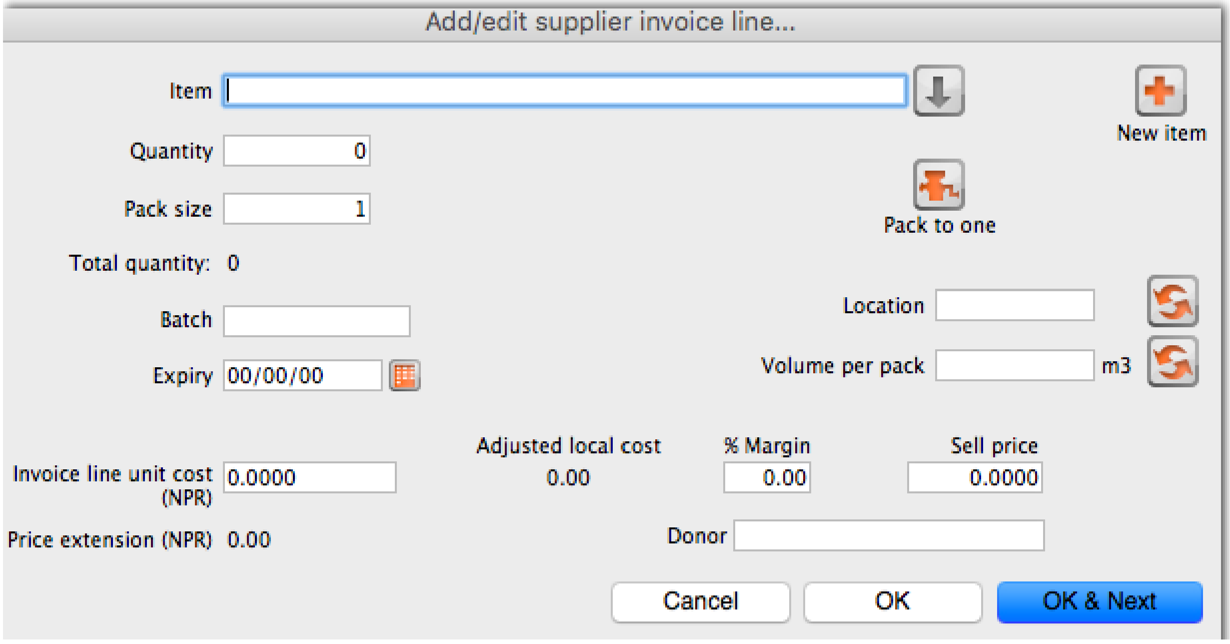
The cursor will be positioned in the *Name* field. Type a and then press *Tab*. If there is only one supplier whose name starts with “a”, the details will automatically be filled in.



In our case, there are two suppliers whose names starts with “a”, so you will see a window listing both of these suppliers. Double-click the line containing “Acme Pharmaceuticals” to choose them for this invoice. The insertion point will jump to the *Their ref* field.

- Type A939 into the *Their ref* field. Press *Tab* to advance to the *Comment* field.
- In the *Comment* field you can type a comment or information to identify the invoice.

- Note that the margin is showing as 10 percent (the percentage that will be added to your cost price to obtain the selling price).
- Click the *New line* button to add the first invoice line. You will be presented with the window for adding invoice lines.



- The cursor will be positioned in the *Item* field. Type a, then press *Tab*. You will see a window listing all items whose name starts with “a”. Double-click the *Amoxycillin 250mg tab/cap* entry to choose it.
  - In the *Quantity* field, enter the number of packs received `1000`. Note that this is the number of packs, not the total quantity of capsules.
  - Enter the pack size `100`.
  - You can ignore the *Location* and *Volume per pack* fields for this tutorial.
  - Enter the batch number b93333.
  - Enter the expiry date `31/12/14` (Presuming you have dates set up to enter as dd/mm/yy. If your dates are set to the USA's mm/dd/yy format, enter `12/31/14`). You only have to enter 2 digits for the year as long as the year is between 1961 and 2060. Dates outside this range must have the year entered as four digits (yyyy).
  - In the *Invoice line cost* field enter the pack cost price 344.
  - The table shown in the picture at the bottom appears if you have *Show previous purchases* checked in your preferences. It will show purchases you have made of this item in the past.
  - *Donor* is the donor who provided funds for the goods on this invoice. You can create donors by activating donor tracking in *File/Preferences/Suppliers/New Supplier* and then check the donor checkbox.

As we have another line to add, click the *OK and Next* button. The entry is recorded, and the window is now blank to accept your second invoice line.

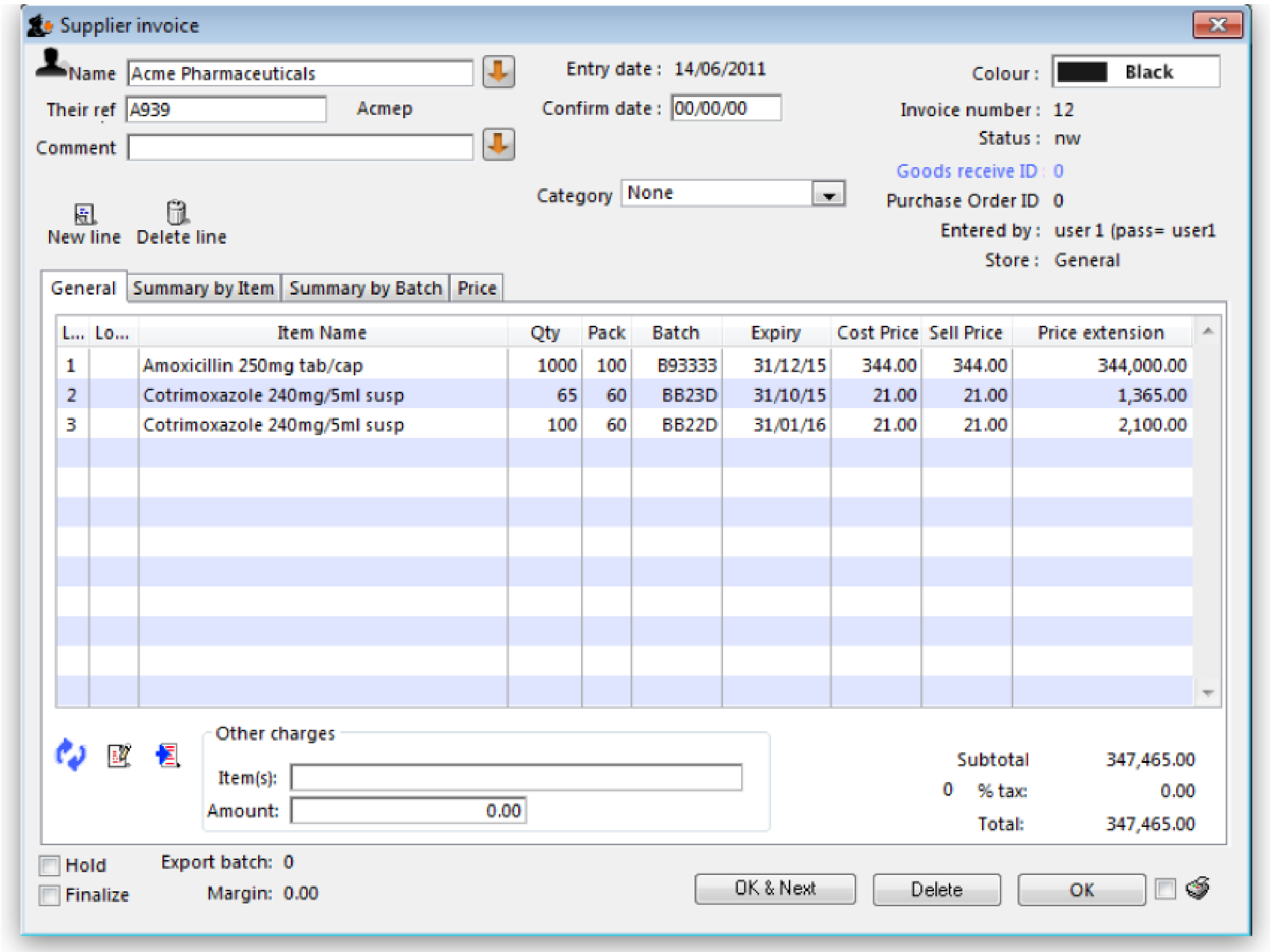
- Enter c into the *item name* field and press *Tab*. In the list of items showing, you will find *Cotrimoxazole 240mg/5mL susp*. Double-click the entry.
- Enter the remaining invoice details for “Cotrimoxazole 240mg/5mL susp”:

- quantity 65.
- pack size `60`. Note that it is better to record the actual volume of most packs, unless the volume is not important - e.g. with eye-drops where you could record the pack as “1”.
- batch bb23d.
- expiry `31/12/13`.
- price `21.00` (You can just enter `21`).

Click the *OK & Next* button to save the details and start to enter another item.

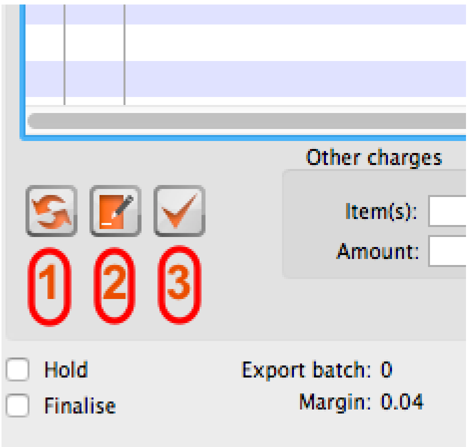
Now enter the third item on the supplier invoice from the example invoice from Acme Pharmaceuticals above. When you have finished, click the *OK* button to take you back to the main list of invoices.

Our invoice will now have 3 items added to it. The invoice total should read “347,465”, and should appear like this:



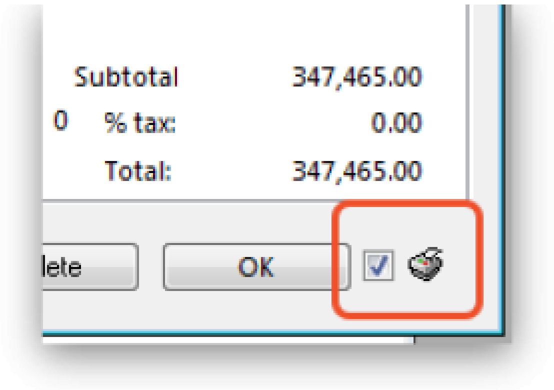
If you have made a mistake, click on the relevant line, which will now be highlighted; double-clicking on it allows you to edit it. You will be shown the line details again, and you can then make corrections and click the *OK* button to save your changes.

There are 3 icons in the bottom left corner of the invoice window.



1. This allows you to rearrange the order in which the lines are shown on the invoice
2. Here you can make a note of anything relevant to this invoice
3. This will copy the details of the invoice to the clipboard

Now click the *OK* button. As long as you have left the "print" checkbox (bottom right corner) checked, you will be asked if you want to print the invoice (you may do so). Note that when you print, you are shown two windows. The first window is the page setup for your printer, the second window allows you to specify how many copies to print, etc. (The second window also has a "preview" checkbox, where you can preview the print job).



As this invoice is a "supplier invoice" it has been "confirmed" when you clicked the OK button in the invoice entry window. You can view and edit the invoice details until the invoice is finalised. Note that if you issue some of the stock you have just entered to a customer, some fields will no longer be editable.

NOTE: as of mSupply v190, a more precise alternative for entering received goods has been implemented. See section 7.02. Goods receipts for information on viewing and editing supplier invoices created via Goods Receipts.

Previous: ***3.07. Viewing Names in Google Maps*** | | *Next:* ***3.09. Enter outgoing goods (customer invoices)***

3.07. Viewing Names in Google Maps

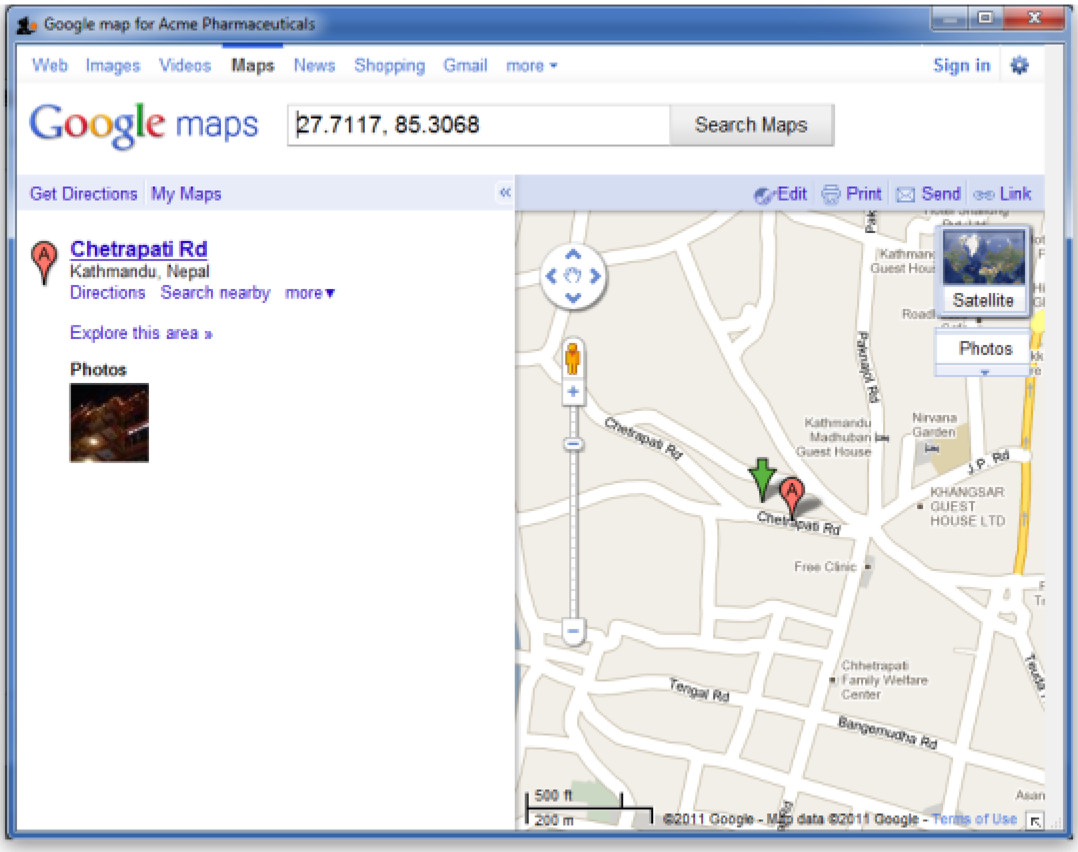
If you know the exact geographical location of the supplier or customer, the *Lat* (latitude) and *Long* (longitude) fields can be completed in their *Photo* tab.

You should use the following conventions when entering the exact geographic location for a supplier or customer:

- Use decimal degrees (not degrees, minutes and seconds)
- In the *Lat* field, locations south of the equator are entered as negative - i.e. the number is preceded by a '-' sign
- In the *Long* field, locations west of the prime meridian are entered as negative - i.e. the number is preceded by a '-' sign

You can use Google Maps to find the exact geographical location. Find the desired location on Google Maps and place the cursor on it. Right-click and select *What's here* from the drop-down list. Google Maps will display the geographical coordinates (the first number is latitude and the second number is longitude). These should be noted and copied to the *Lat* and *Long* fields in mSupply.

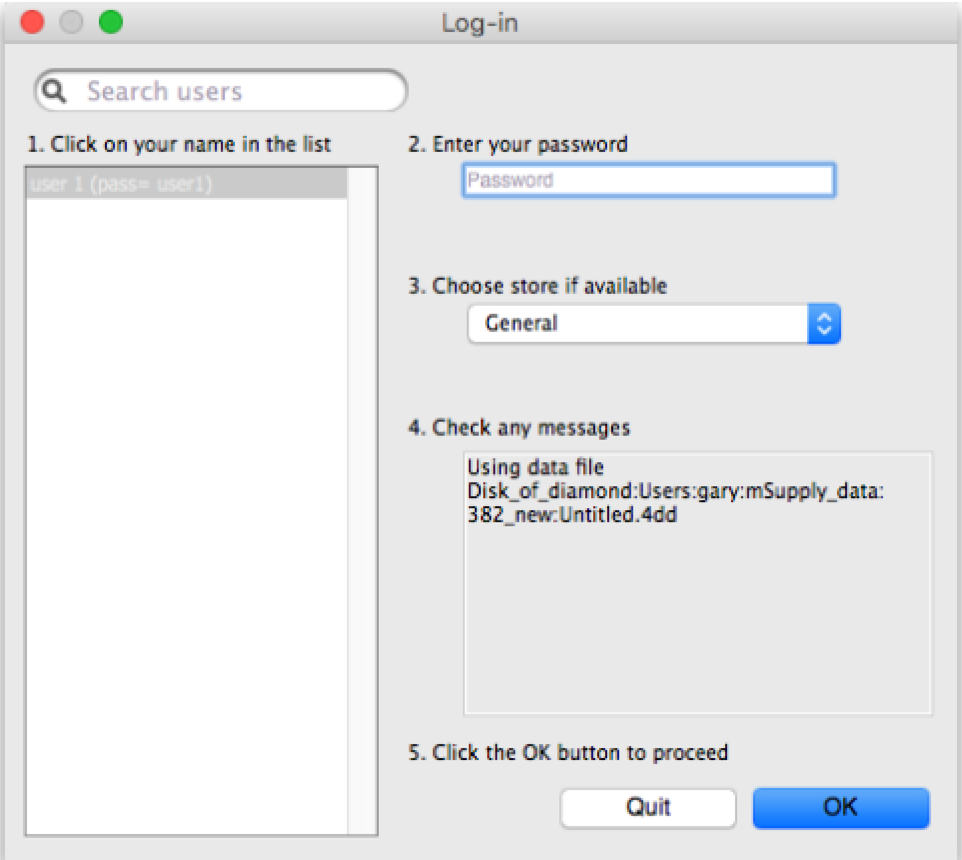
In our example, the location of the imaginary Acme Pharmaceuticals is on Chetrapati in Kathmandu. Click on the *Google Maps* button to display a map of the vicinity. The precise location is pinpointed by a green arrow.



Previous: ***3.06. Customers and suppliers*** | | *Next:* ***3.08. Enter incoming goods (supplier invoices)***

3.02. Logging in

When mSupply starts you will be presented with the login window:



This is the login window for when mSupply is started for the first time.

Username

Select your username from the list.

- Only users from your facility will be displayed. If the list is long, you can type the first few characters of your username in the *Search users* field to shorten the list to usernames that begin with what you have typed, sorted alphabetically.
- If you're just opening mSupply for the first time after installing it, select *user 1(pass= user1)*.
- Each time it opens, mSupply will default to the user who last logged in.

Password

Enter your password. When this window opens, the focus is on the password field. This allows the user who last logged in to be able to quickly log in again.

If using the *user 1(pass= user1)* name, type `user1` as the password.

Store

Select the store you want to log in to from the drop-down list.

- Most mSupply users will only be able to access a single store. For users who have access to more than one store, the login screen allows you to select any of the stores to which you have access. Once you have logged in you can switch the store without logging out - see Switching stores.
- After selecting the desired store, all transactions you process will relate to that store.
- **Supervisors and other Level 1 users** will have an additional menu item, *Supervisor - All stores*. In this mode, all stores are accessible. You would use this mode, for example, when placing an order for supplies that will be distributed to a number of stores or for reporting on more than one store - see 26.07. Virtual stores.
- **HIS** - if you have enabled the Hospital Info System (HIS) in the user login permission settings, and at least one licence is allocated to HIS (see HIS preferences), then you will also see *Hospital Info System* in the list of stores. If you select this, the login mode automatically changes to *HIS mode*.

In a synchronisation system (29.01. Introduction to Synchronisation) the user will see a list of all the *active* stores they have permission to log into in this datafile.

Messages

View any messages that might be displayed.

Click OK

Finally, click *OK* to login. If login is successful you will be taken to the navigator screen.

As with all windows in mSupply, pressing the **Enter** key at any point produces the same result as clicking on the highlighted button, which, for this window, is the *OK* button.

This facilitates fast keyboard control.

There are various options that can be set that cause a user to be taken to other screens or shown other information after logging in successfully. For example, Reminders or Invoices preferences.

Journal file

If one has not already been set up and if you are using a single user copy of mSupply, after logging in you will be asked to select the location for the journal file. A good place is to put it in the same folder as the datafile. You will only be asked to do this once.

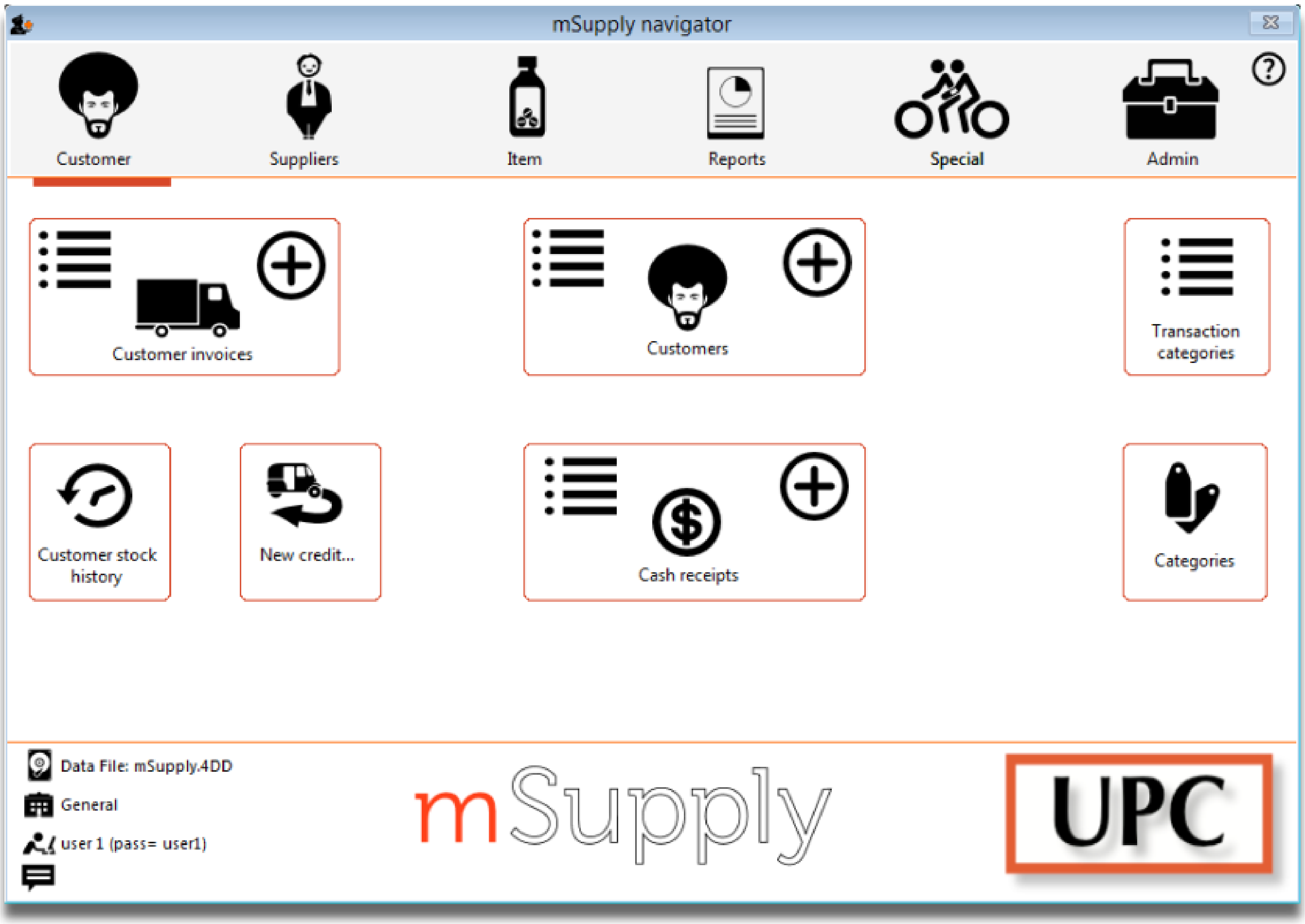
The journal file is a place that mSupply records every database transaction that occurs after the last backup. It is used for repairing a damaged datafile and for investigating some types of errors.

*Previous: **3.01. The tutorial like no other** | | Next: **3.03. Opening the example data file***

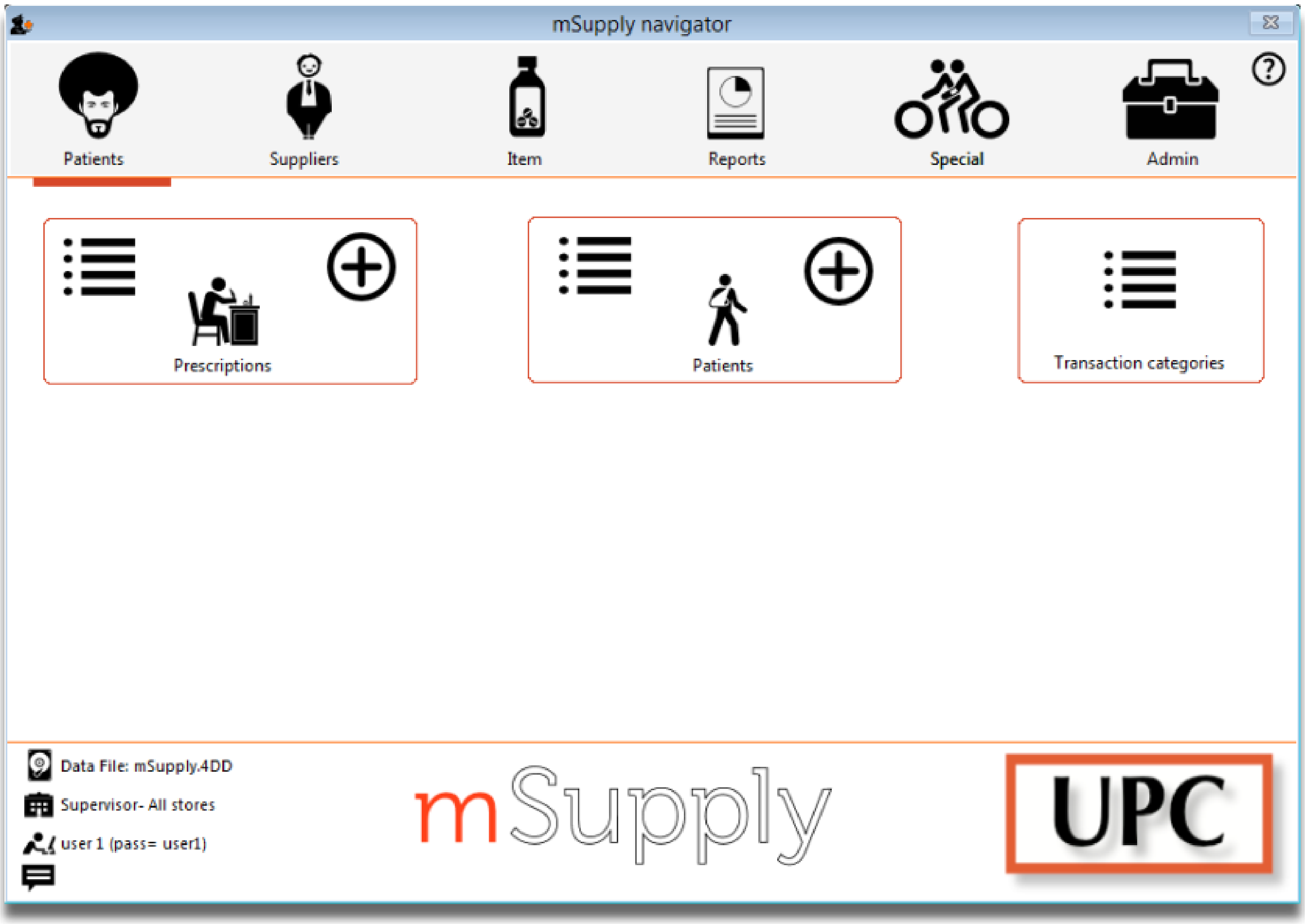
3.04. Navigator

Overview

The mSupply navigator provides access to most of the functions you will be using regularly in mSupply. Many of these functions can also be opened using shortcut keys. Once you have gained some experience, you may find it quicker to use the shortcuts.



The navigator always opens at the **Customers** screen in Store mode, shown above, or the **Patients** screen in Dispensary mode, shown below.



Displayed along the top of the screen are four items of information:

- the **mode** selected at login (Store or Dispensary)
- the **store** in which you are working - for most users, this will be General
- the active **data file**
- the **user** currently logged in

Immediately below this, there are six large icons, **Customers** or **Patients, Suppliers, Item, Reports, Special** and **Admin**. When you click on one of these large icons, the panel below will display more icons for each of the available functions and procedures. You can select the smaller panel icons by clicking on the icon, or by advancing through the icons with the right and left arrow keys and pressing *Enter*.

In the next part of the tutorial, you will be using the **Items** panel of the navigator. As the same procedures are common to all panels, you will quickly become familiar with them.

The bottom right area of the navigator screen is available for displaying your logo. In our example, the logo of “Acme Medical Supplies” is displayed. You can add your logo by through the menu *File>Preferences>Logo* - see 16.06. Entering a new logo.

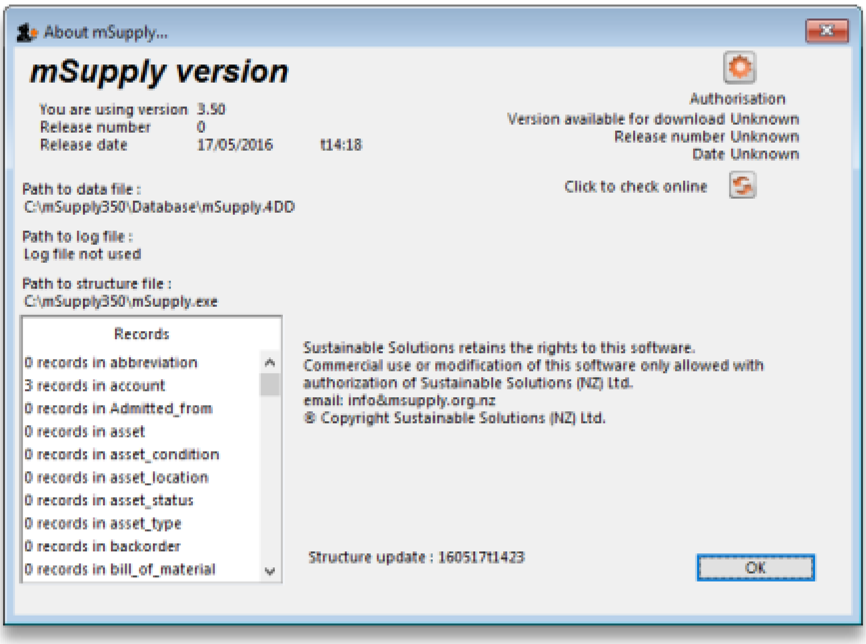
Previous: ***3.03. Opening the example data file***		*Next:* ***3.05. Creating and viewing items***

3.03. Opening the example data file

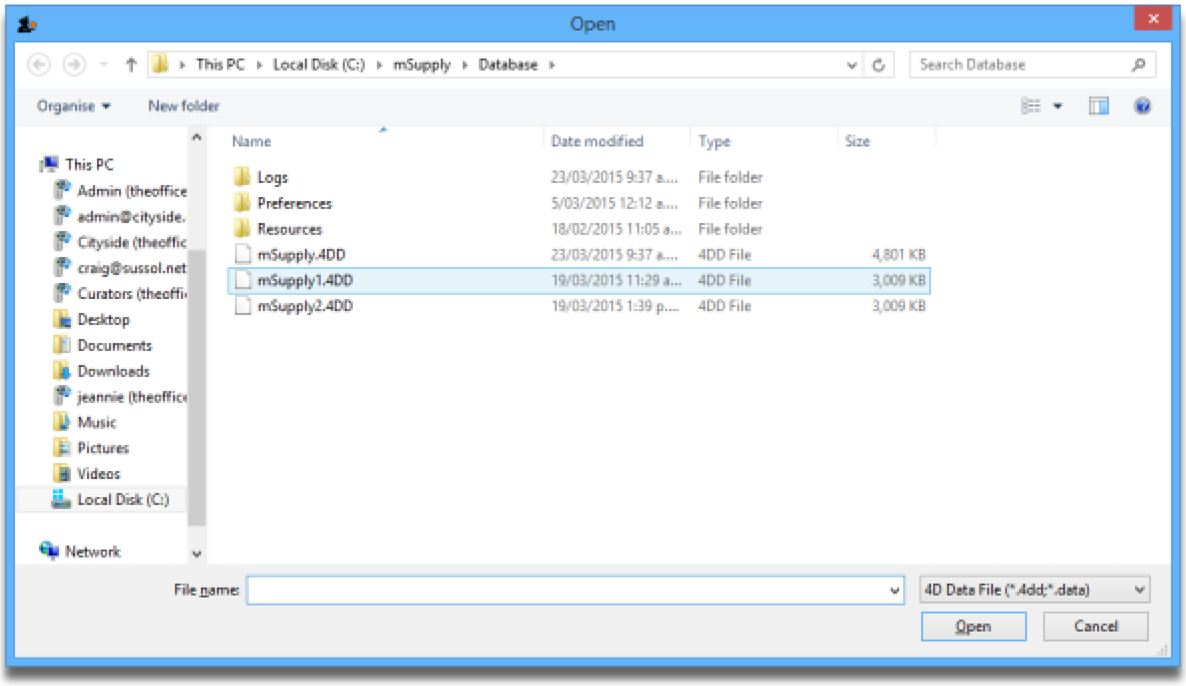
You will have two icons on your desktop - double-click the **mSupply** icon.

If you are opening mSupply for the first time, the program should automatically open the example data file.

The full path to the data file is displayed, along with other useful information by choosing *Menu>Help>About mSupply*.

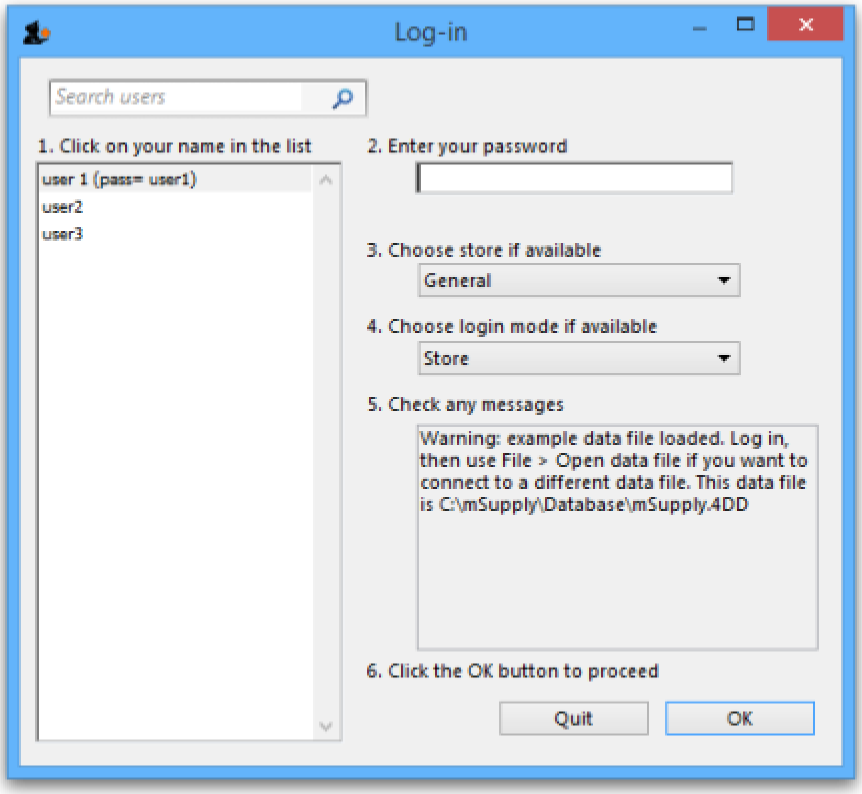


If you have already been using mSupply and have another data file open, but would like to open the example data file for training, then you can use *Menu>File>Open data file...* to open the example data file. In Windows, by default the example data folder is stored at *c:/mSupply/database/*; navigate to the location and open the data file.



If you have chosen a different location from the one suggested by the installer, the example folder will be in your chosen location.

A login window is presented as mSupply opens the data file.



The **user 1 (pass= "user1")** entry should be highlighted, but if it is not, select this name.

Type `user1` at *2. Enter your password*.

The *Choose store if available* drop-down list will display **General**. The *Choose login mode if available* drop-down list will display **Store**. These should not be changed.

The message panel states that the example database will be used.

Click the *OK* button and the mSupply navigator screen appears.

*Previous: **3.02. Logging in** | | Next: **3.04. Navigator***

3.09. Enter outgoing goods (customer invoices)

Now let's suppose we have just received an order as follows: <HTML>

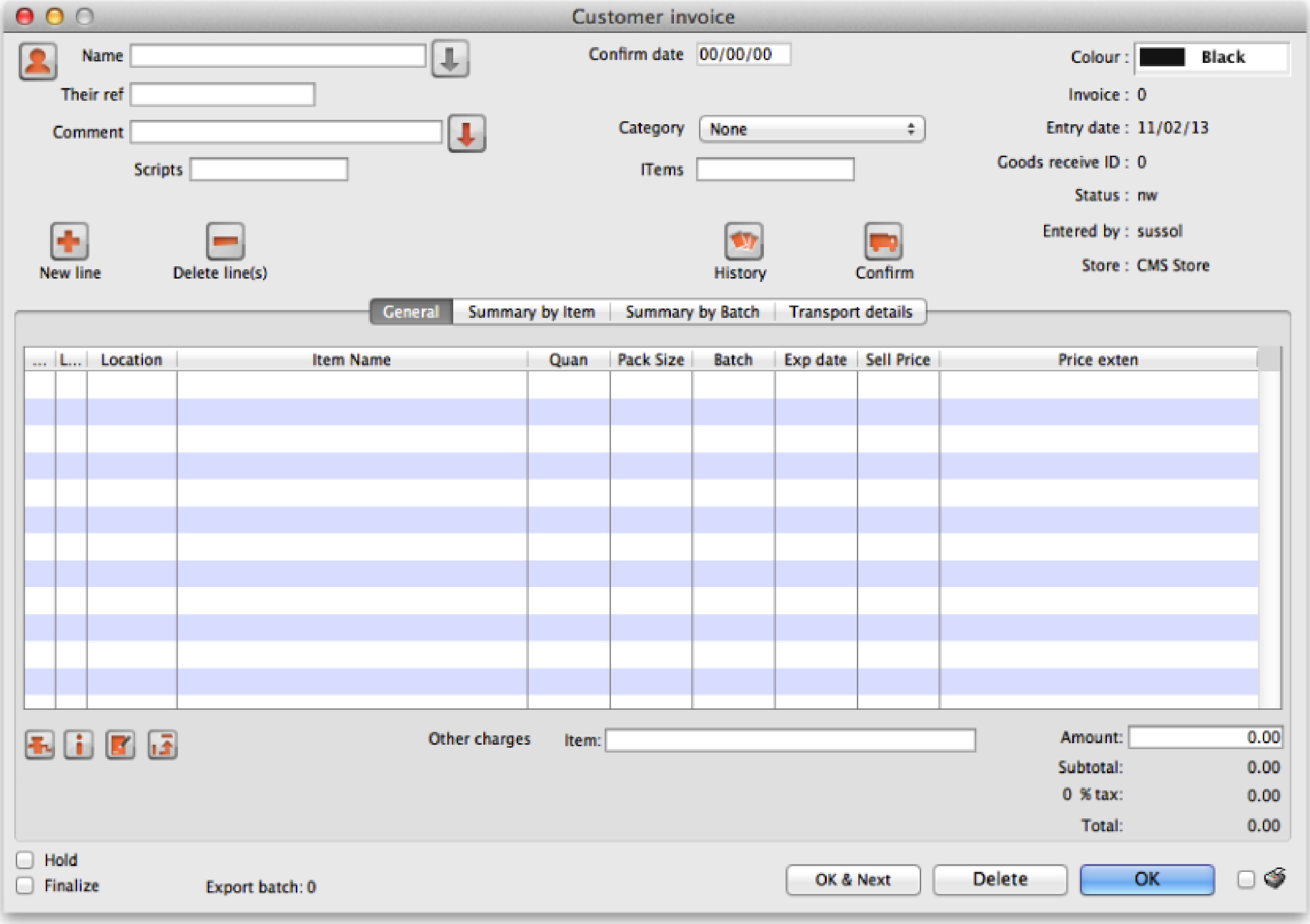
</HTML>

From:	Blue Cross Hospital
Order number:	PO882
Delivery: Express courier please	
Item	**Quan**
Amoxycillin 250mg tab/caps	10,000
Cotrimoxazole 240mg/5mL susp	120

<HTML>

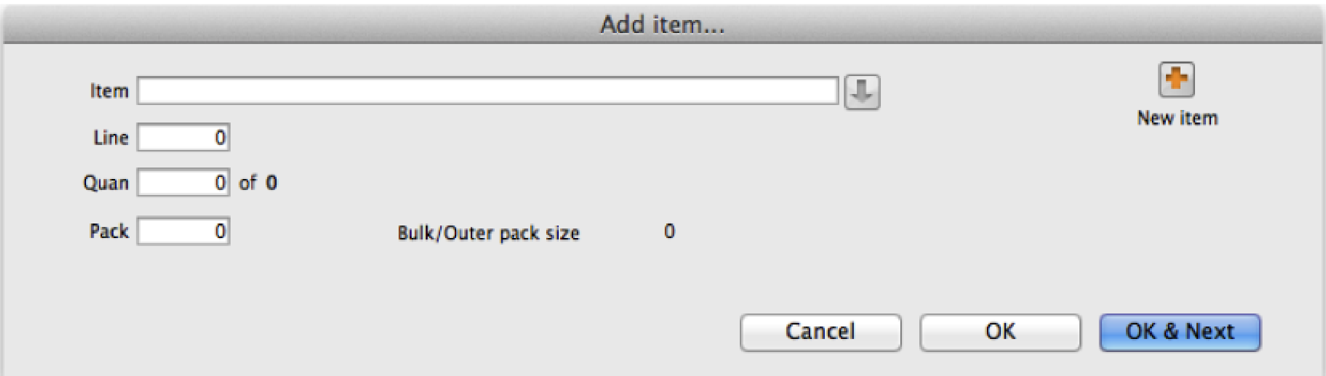
</HTML>

Choose *New invoice* from the *Customer Invoice* menu, and the following window appears:



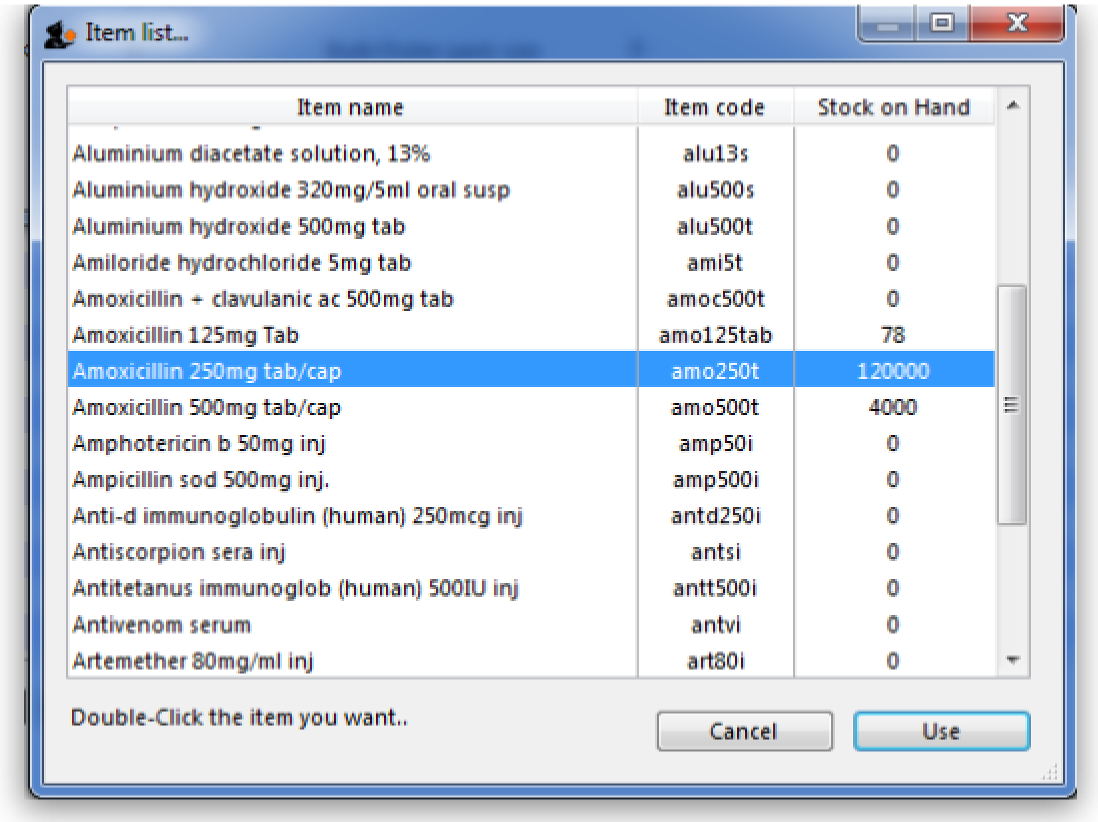
Type b into the *Name* field, and press *Tab*. You will be presented with a list of customers whose name starts with “b”. Double-click the *Blue Cross Hospital* row to select it.

- In the *Their ref* field enter P0882.
- In the *Comment* field enter `This afternoon by courier`
- Click the *New line* button to add a line to the invoice. You are presented with the *Add item* window.

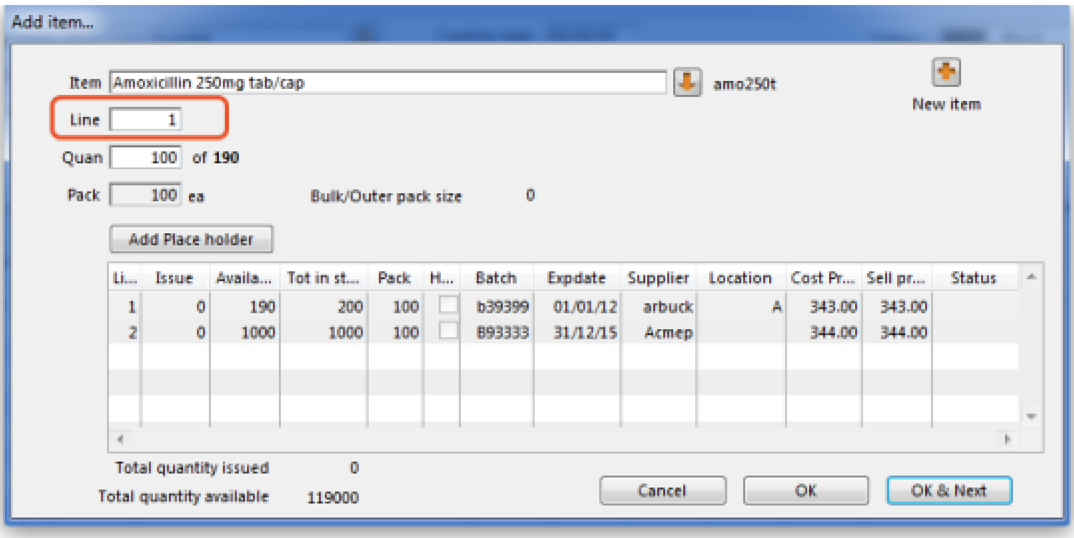


Enter the following details:

- Type a into the *Name* field then press *Tab*. In the list you are presented with, double-click on the *Amoxycillin 250mg tab/cap* row.



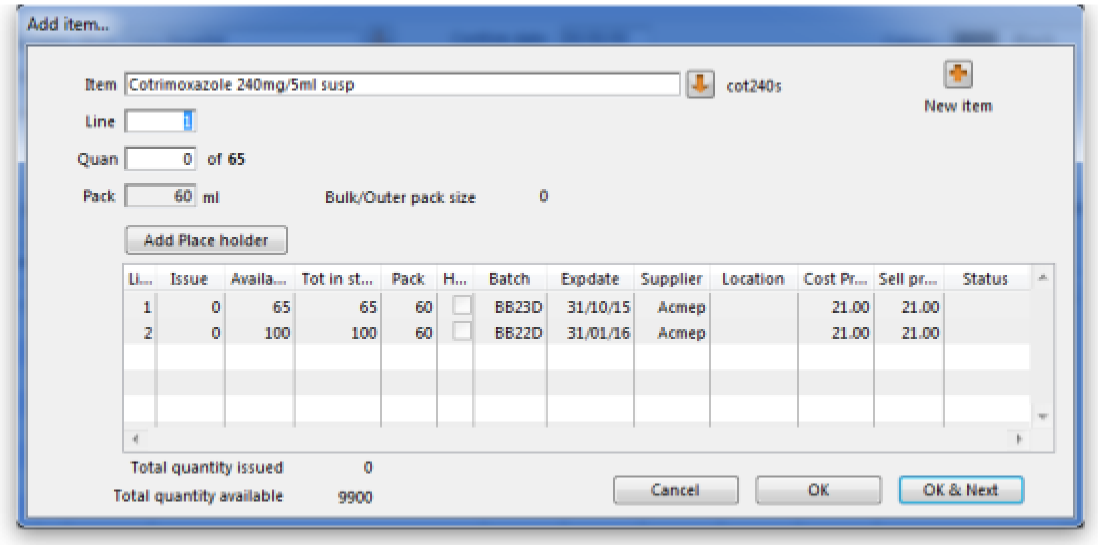
- You will see that a list of available stock has appeared in the window, and the cursor has moved to the **Line number** field. Enter 2 to choose line 2. (The list is sorted so batches with the shortest expiry date are at the top - usually you would choose the shortest expiry batch, but today we're being different!).



- Quantity field - the line we have chosen has a pack size of 100, so you will need to enter a quantity of `100` to make a total of 10,000

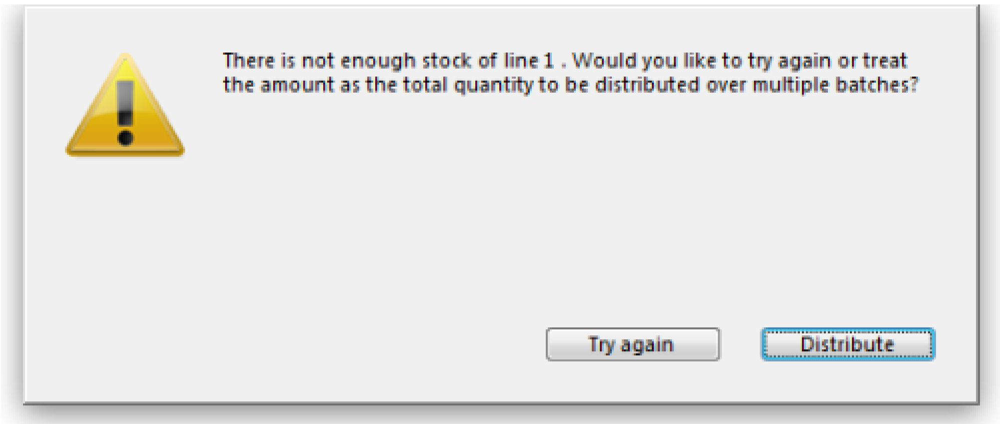
Click the *OK & Next* button to add the second line of the order.

This time enter c and press *Tab*. Double-click on the *Cotrimoxazole 240mg/5mL susp* row. The window will close and the list of available batches and quantities will be completed.



Note that in the list of available stock, the stock we entered from “Acme Pharmaceuticals” earlier in this tutorial is at the top of the list. This is because the list is sorted so items with the shortest expiry date are at the top of the list.

Line 1 is selected, despite the insufficient stock of line 1 to meet the order of 120. Nevertheless, you should enter `120` in the *Quantity* field, press *Tab*, and the following message will appear:

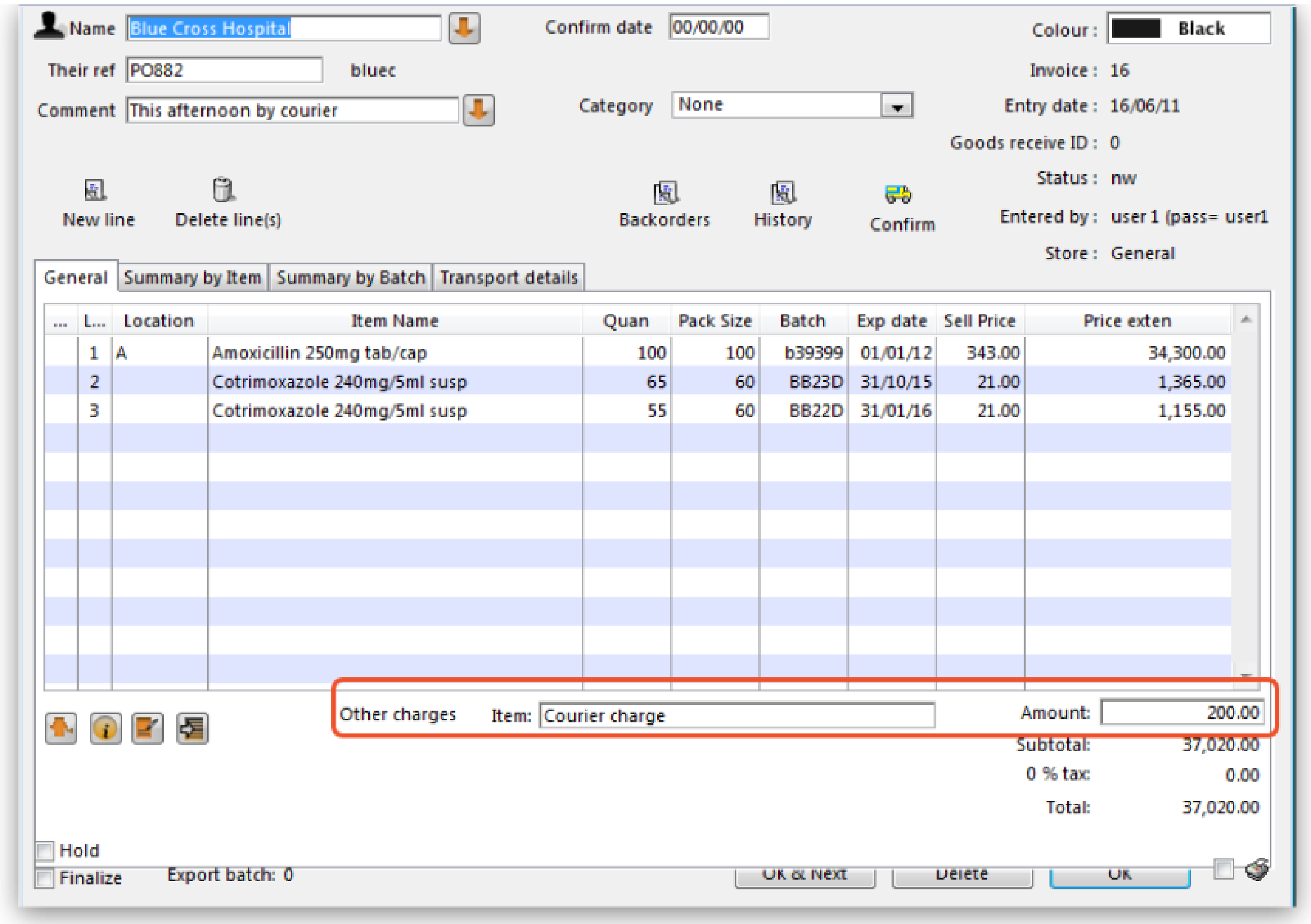


For this tutorial, choose *Distribute*. Distribute is likely to be your normal choice. Distribute will mean that the stock needed to complete the order will be drawn from another batch/batches, starting with the batch which will be the first to expire. There will be occasions, however, when you wish to override this automatic means of distribution. If this is the case, you would select *Try Again* and manually select the batches from which you wish to meet the order.

Click the *OK & Next* button

Because the invoice has not been confirmed, the “available” amount for the line is decreased, but the “total stc” (total stock) will remain the same. mSupply includes these lines in the list so you can see stock that has been allocated to an invoice but has not yet left your store. You can then edit the other invoice if stock is urgently needed on the current invoice.

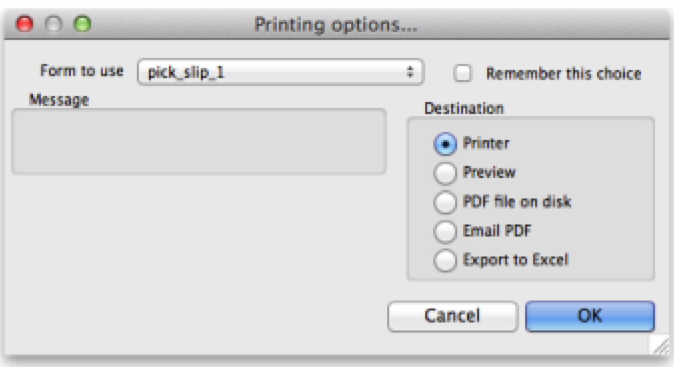
Click *OK* as we are finished entering lines. You will be returned to the main Customer invoice window.



At the bottom right of the invoice you will see the invoice total.

- As the customer has requested an express courier, we will charge them Rs200 for the service (Rs = rupees the currency in our tutorial).
    - At the bottom of the window you will see the *Other charges* field. Enter `Courier charge` and press *Tab*.
    - In the *amount* field enter *200* and press *Tab*. The new total should be **37,020.00**.

Now we are ready to print a packing slip. Make sure that the *Print* checkbox is checked in the bottom right corner, and click *OK*. A window appears displaying your print options.



We want to print a packing slip, so the default settings are correct. You will notice the packing slip printed has a column where you can record the actual quantity packed.

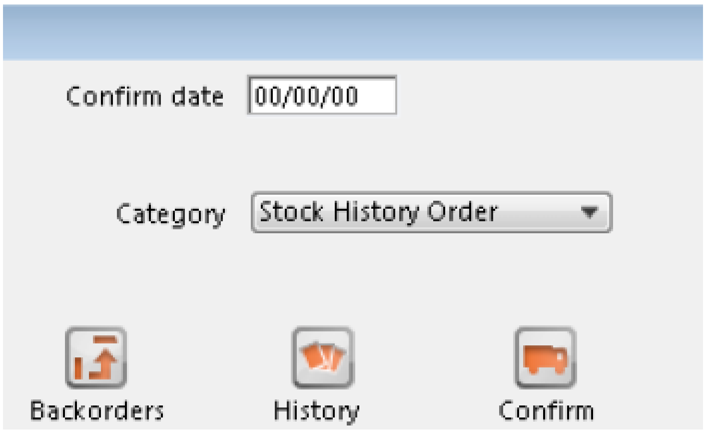
Confirming the invoice

Let's suppose the order was successfully packed according to the packing slip, and you now want to confirm the order and print an invoice to pack with the goods. (We're in a hurry - the express courier is on her way!)

First, we need to look up the invoice.

- Choose *Show invoices* from the *Customer invoices* menu.
- If you know the invoice number (printed on the packing slip) you can enter it. Or, to bring a list of the most recent invoices, you enter the number of invoices to view. As we know the invoice we want is the last one to be entered, you can type 1 and click *OK* - you will be taken straight to the invoice.

Click the *Confirm* truck icon.



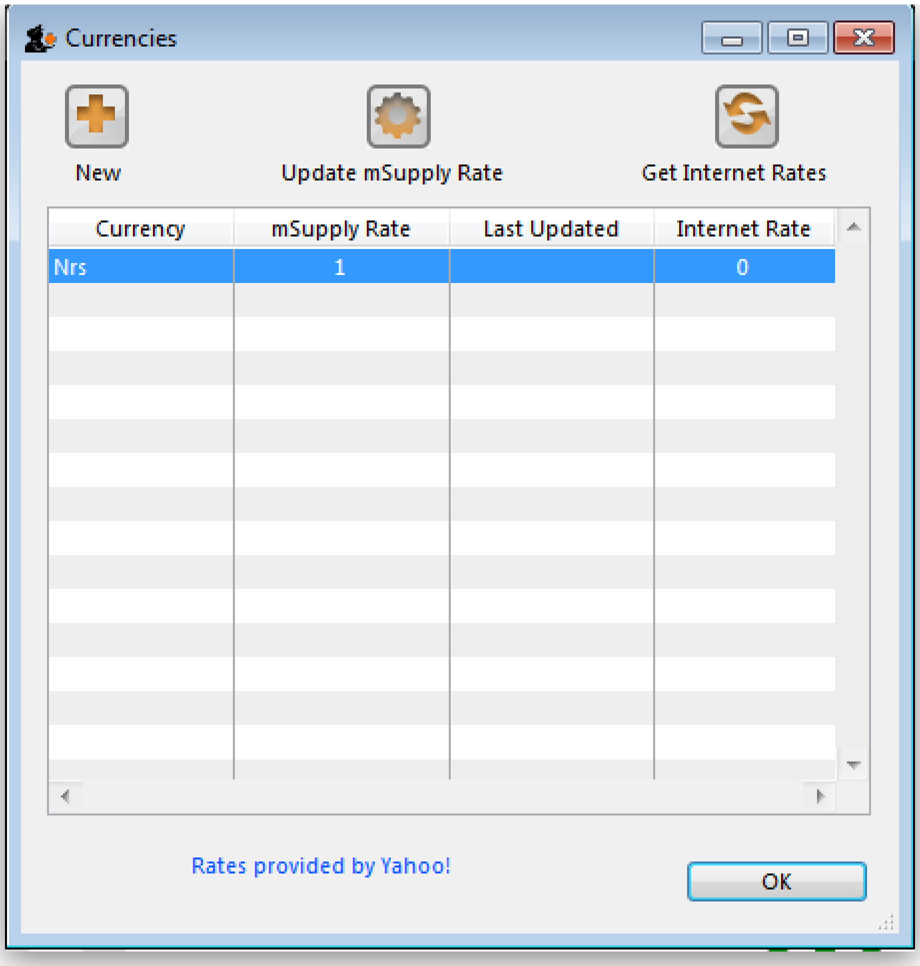
Today's date will appear in the Confirm date field. Click *OK* to confirm you want to proceed.

The invoice is confirmed, and you are given the opportunity to print an invoice.

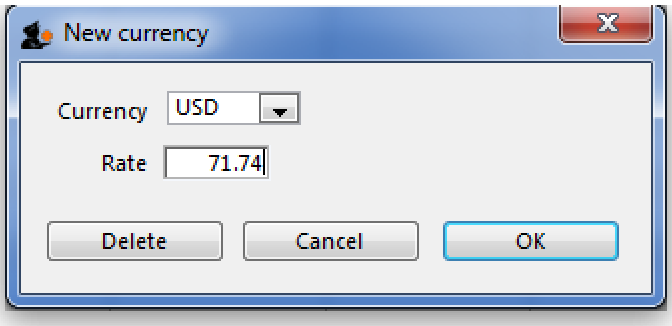
Previous: ***3.08. Enter incoming goods (supplier invoices)*** | | *Next:* ***3.10. Entering quotations***

3.10. Entering quotations

mSupply allows you to keep a record of prices that suppliers have quoted to you for each item. Let's assume that you have just received 2 quotations for Amoxycillin 250mg capsules. One of the companies has used US dollars for their quotation, and the other has used British pounds. Before entering the details of the quotations, it is necessary that both of these currencies are recognised in mSupply. To achieve this, choose the menu item *Special>Currencies*. This window appears:



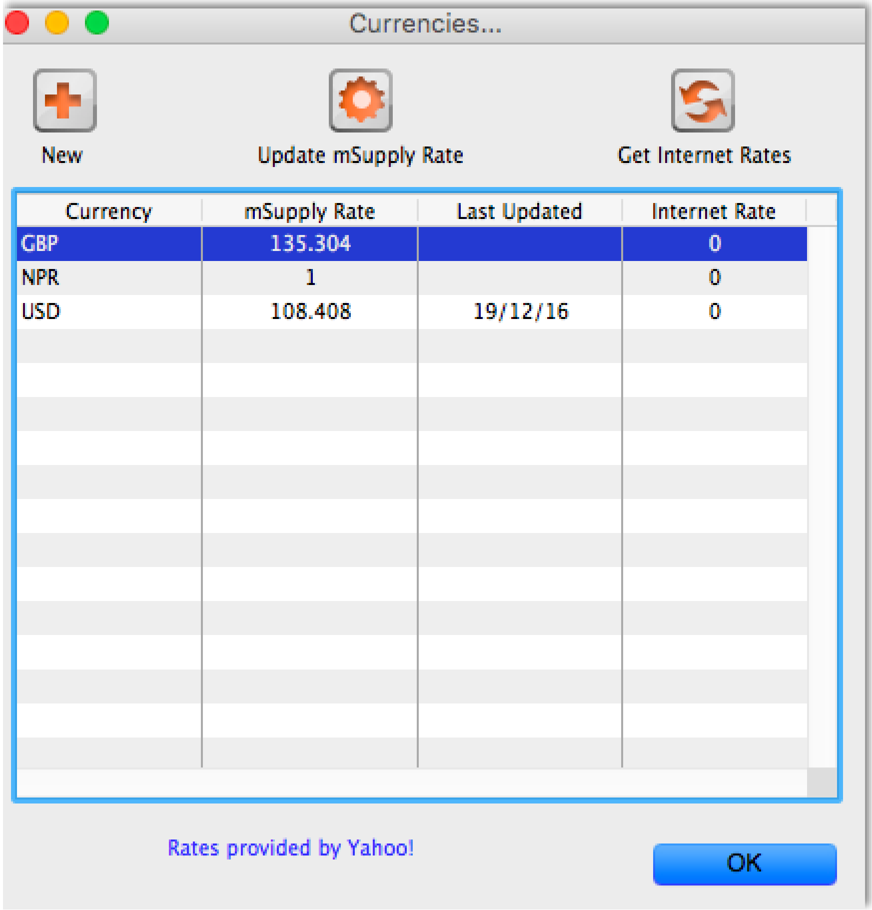
Click on the *New* button, and a window appears which allows you to enter another currency:



- Enter USD in the *Currency* field.
- In the *Rate* field you should enter the number of units of the default currency - in this case Nepali Rupees - equivalent to 1 US dollar. At the time this tutorial was created, the rate was 71.74 N.Rs. to US $1. Enter `71.74` in the *Rate* field.
- Click on the *OK* button.

Repeat the above for British pounds - assume that the rate is 116.36.

Once you have completed this, the Currencies window should look like this:



We're now ready to proceed.

To enter a quotation:

1. Choose *Items>Show items*
2. Type `Amox` then press *Enter*
3. Double-click the *Amoxycillin 250mg caps* entry on the list
4. The item view window, on the left, has vertical content list (General, Usage, Quotes). Click the *Quotes* line.
5. Click the *New Quote* button.
6. Note that the item is entered for us. We need to choose a supplier and enter their price details.
7. Enter `Arb` in the supplier field and press *Tab*. Arbuckle distribution is automatically chosen. They have quoted in US dollars, so choose *USD* from the currency menu.
8. Their price is US $3.50 per 100 capsules, so enter `3.5` in the price field and `100` in the pack size field.
9. Click *OK* to save the entry
10. Now click *new quote* again and enter the following details:

<HTML>

</HTML>

Supplier	**Gold Medical Supplies**
Currency	Sterling [GBP]

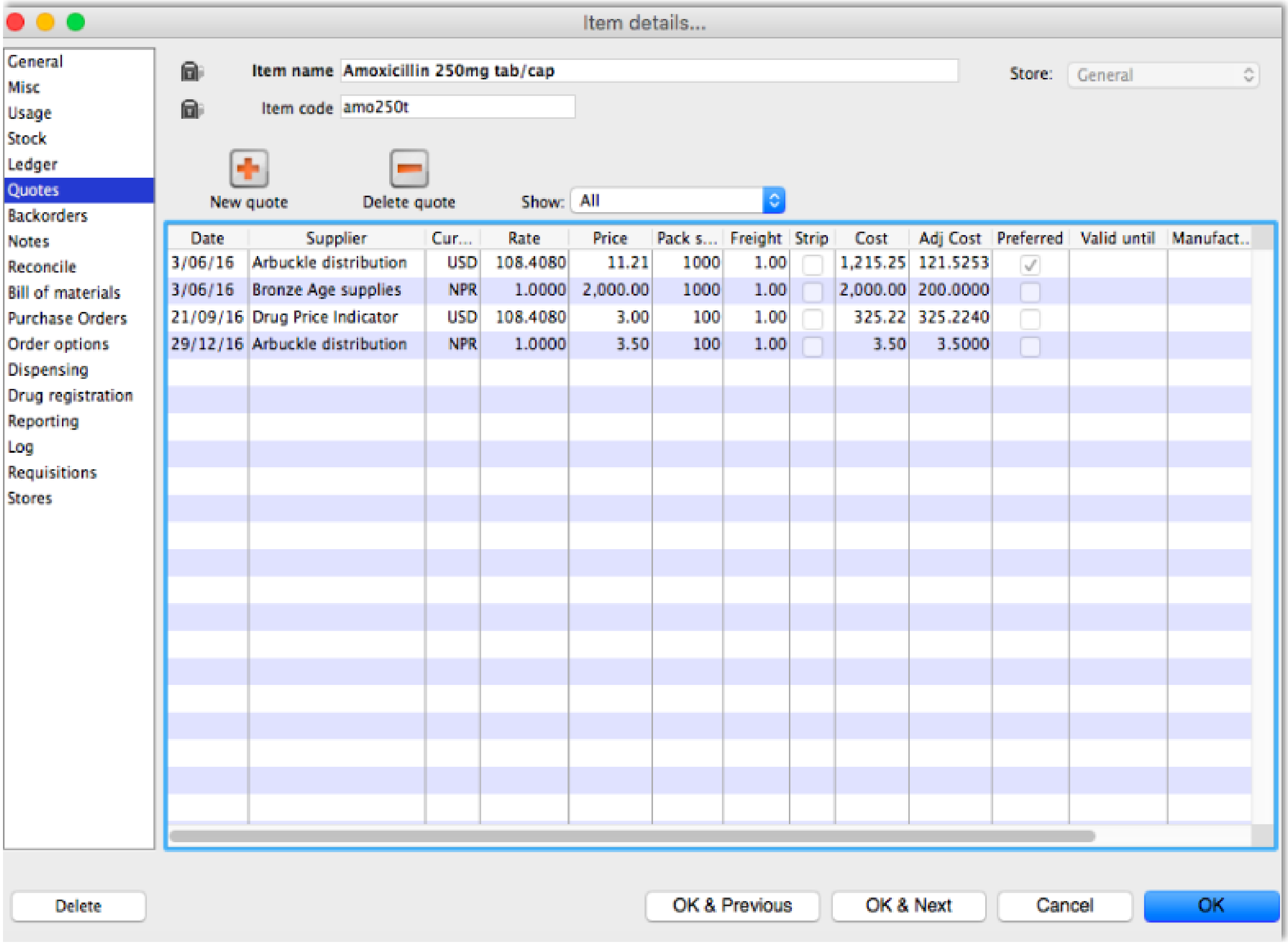
Supplier	**Gold Medical Supplies**
Price	20.00
Pack size	1000

<HTML>

</HTML>

Click *OK* when you are done.

Now we can see the list of quotes, which should look like this:



Notice how the adjusted price takes into account differences in pack size and currency, so you can easily compare suppliers.

Previous: ***3.09. Enter outgoing goods (customer invoices)*** | | *Next:* ***3.11. Working with lists***

3.12. Where to now?

- Use the example database to experiment with different commands as you read about them in the user guide.
- Have a “dummy run” at starting a new data file and using it.
- Return to our main documentation page at www.docs.msupply.org.nz

*Previous: **3.11. Working with lists** | | Next: **4. Items***

3.11. Working with lists

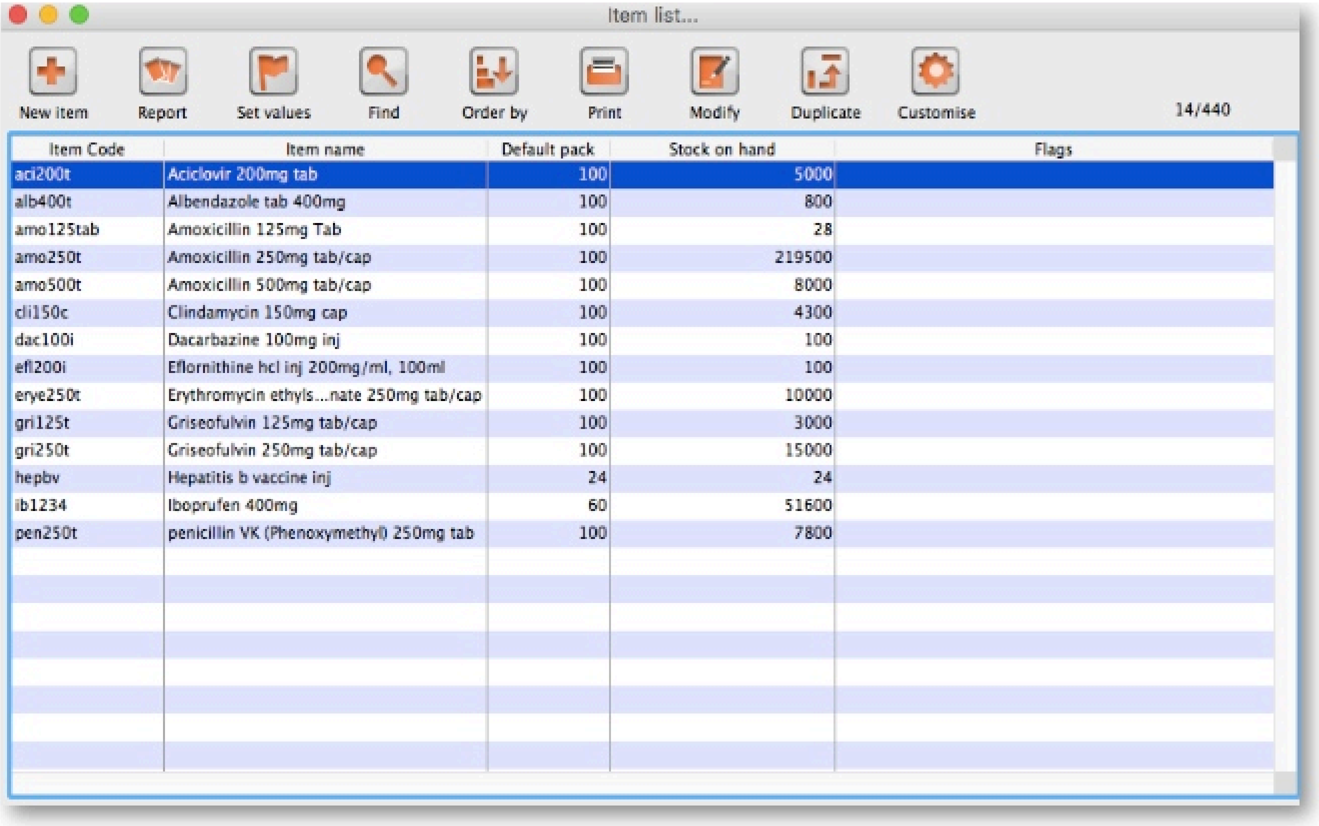
Whenever you perform a search in mSupply resulting in more than one item being found, you will be presented with a list of records (e.g. items, names, contacts or another list) that match the criteria you entered.

mSupply uses two types of list display.

1. Shorter lists, such as an invoice or stock lists, are displayed with a striped background. These lists have resizable and moveable columns. They also and have an indicator to show the sorted column. Their use is discussed in the next chapter.
2. Longer lists, such as item and transaction lists, which can have thousands or millions of records.

In this tutorial section, look at the tools for handling of the longer lists.

When longer lists are displayed, a series of buttons are available along the top of the window, as shown in the below screenshot (note only a small list is shown for the purposes of the tutorial):



General

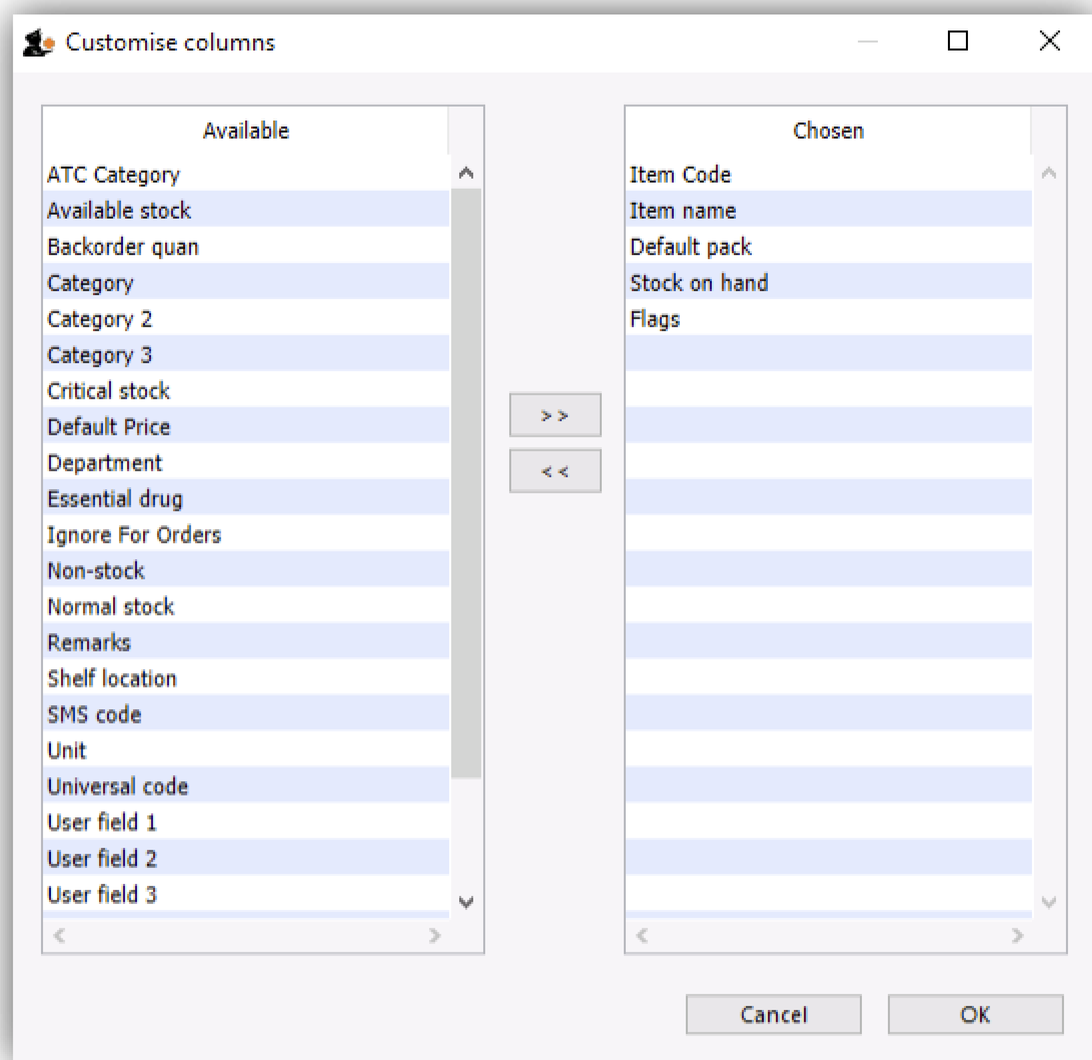
Viewing or editing a particular record: To view or edit a record, double-click the row in the list you wish to view. A new window will open showing the details of the record you clicked.

Column widths: The easiest way to change column widths is to drag the dividers (the dividing line) between the columns in the list view. Note that if the total column width is too wide for the window, a horizontal scroll bar is added to the list allowing you to view columns to the right of those displayed.

Choosing the column order: To change the sequence of the columns in a list, drag a column header to a new location.

Customising

Clicking the *Customise* button in the toolbar will display this window:



The list on the left-hand side gives all of the available fields (displayed in columns). The list on the right-hand side is a list of fields (columns) you are currently using.

To add a field to your view, click on the field in the left-hand list. You can control-click to add multiple columns at the same time. Then click > >, the right-pointing button, in-between the lists.

To remove a field from your view, select the field(s) to remove from the right-hand list,. Then click < <, the left-pointing button, to move the fields back to the available list.

You can not remove the first column for any list as it is the key column to identify each row uniquely.

Renaming columns: By double-clicking on a field name in the right-hand list you can change the column title.

Ordering

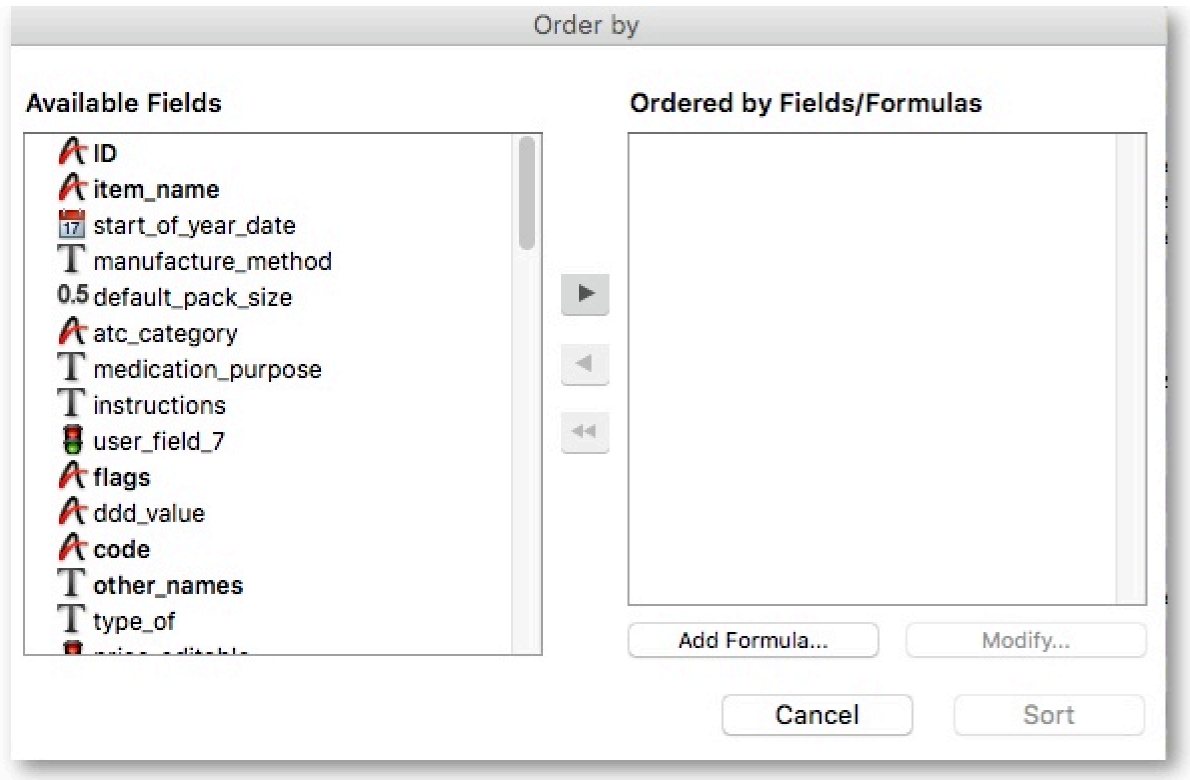
Ordering a list is the same as sorting it. Frequently a column may be ordered by clicking on the column heading. The column will be sorted in ascending order. **Ascending** means:

- A > Z (upper and lowercase are not considered different)
- 1 > 2 > 3 for numbers
- earlier dates to later dates

Descending means the opposite of **Ascending**.

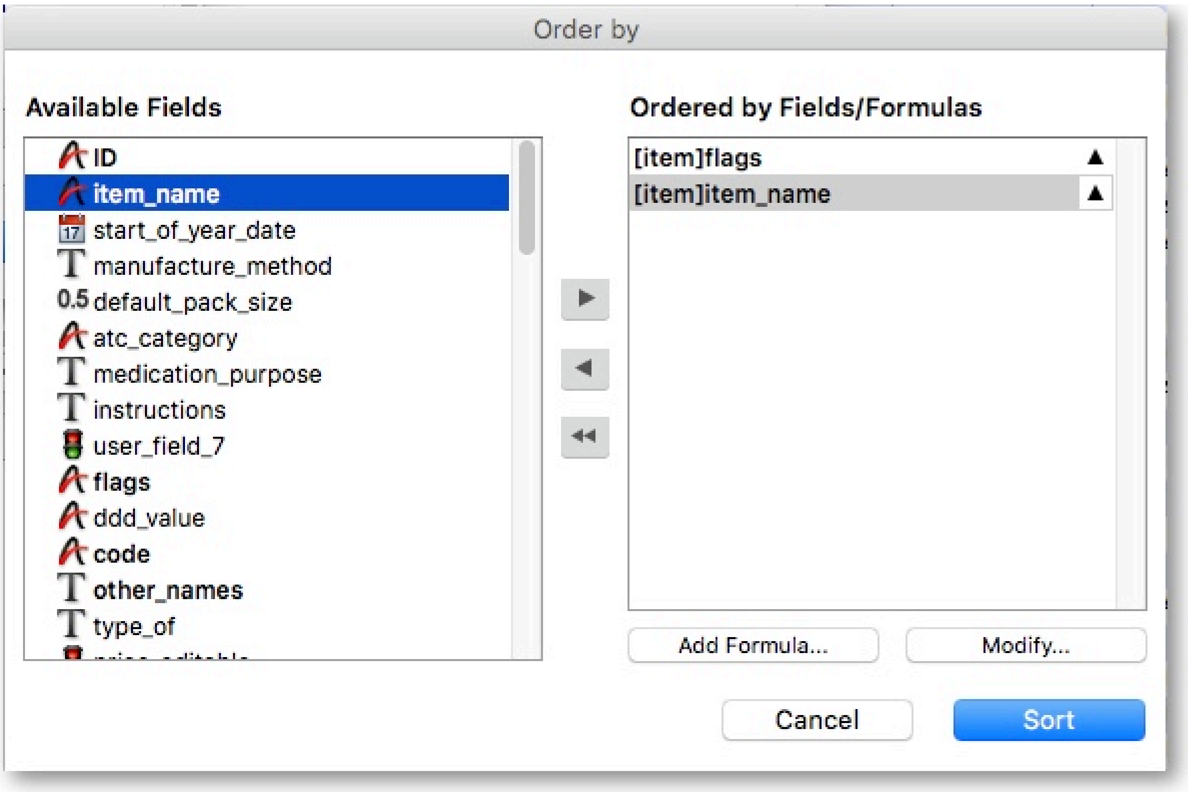
Note that ordering a list does not add or remove any records from the list. It simply changes the order in which the records are displayed.

Should you require two (or more) sort parameters, clicking the *Order by* button opens the following window:



The *Available Fields* list will reflect the type of records you are viewing. In our example, the list shown is for **Items**.

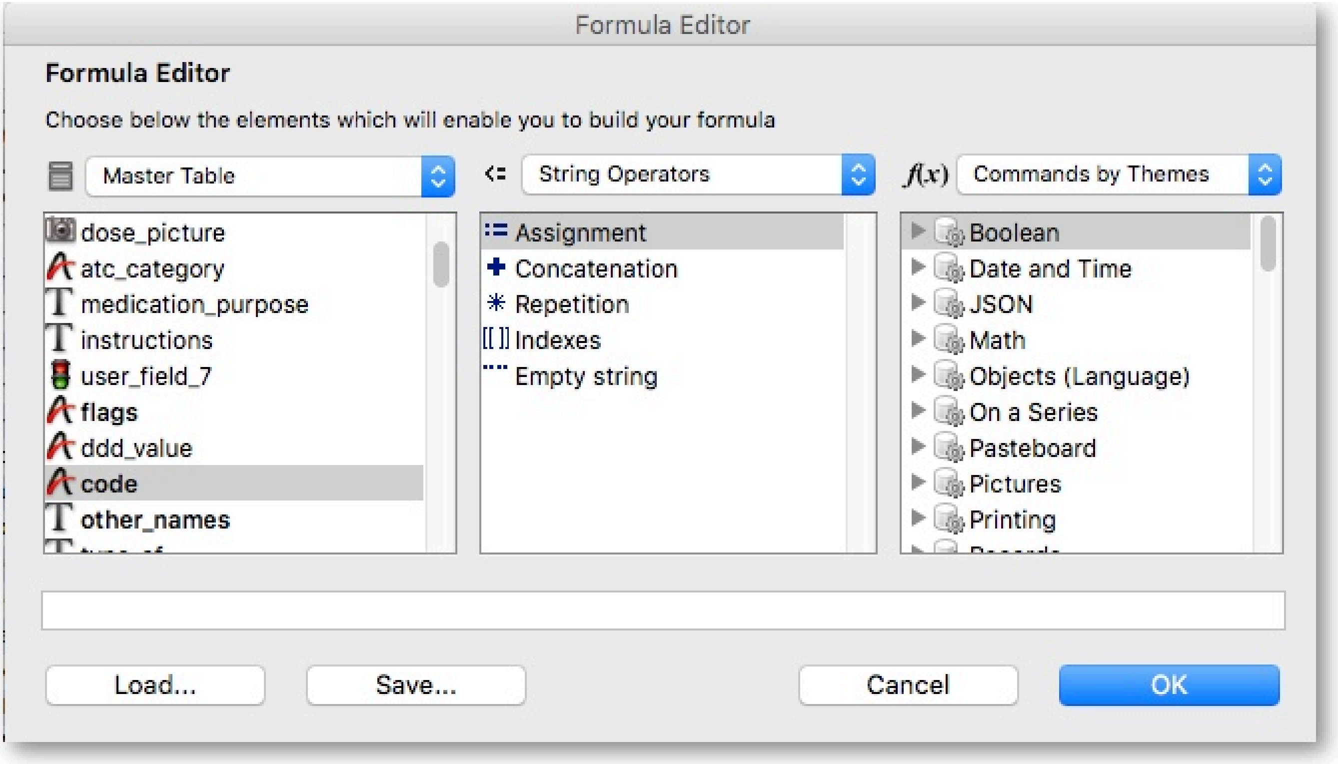
To order by a particular field, double-click it in the left-hand list. You can also drag fields to the right-hand list, or highlight the field in the left-hand list and click the right-pointing arrow. You can order by multiple fields by adding further fields to the right-hand list. Double-clicking on the *flags* and *item name* fields in our example results in this window:



To remove a field: Highlight the field in the **Ordered by Fields** list, then click the single left-pointing arrow between the two lists. The double left-pointing arrow will clear all fields from the **Ordered by Fields** list

To change field ordering: Each item in the **Ordered by Fields** list has a small triangle to the right. If pointing up, the ordering will be ascending. If pointing down, descending. To change the direction, click on the *triangle* for each field.

Using formulae: If you want to order by a formula, click the *Add Formula* button. Here the formula window is shown, and the formula *Length([items]code)* has been entered.



Using this formula would allow you to identify items whose item code is shorter/longer than your organisation's specifications.

Click the *OK* button to close the window.

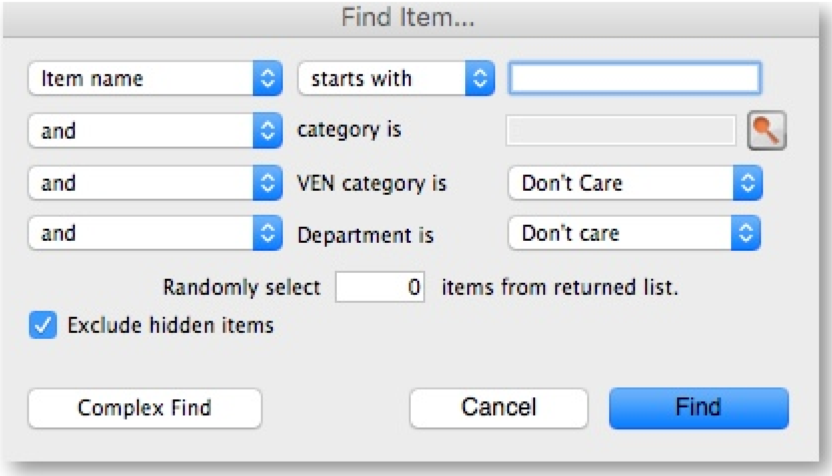
Once the details are entered, click the *Order by* button to order the list.

Printing lists

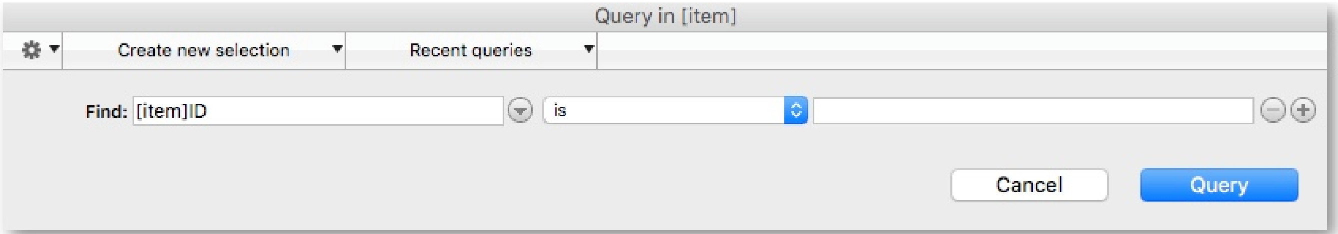
You can press the print icon to send the list to Excel. The list will display in Excel with the column headings you have selected.

Find

This button opens a simple find window where you can enter the start of the item name or code.



Complex finds: The window shown above has a *Complex Find* button. This allows you to perform a search using multiple criteria. Clicking this button shows the query editor



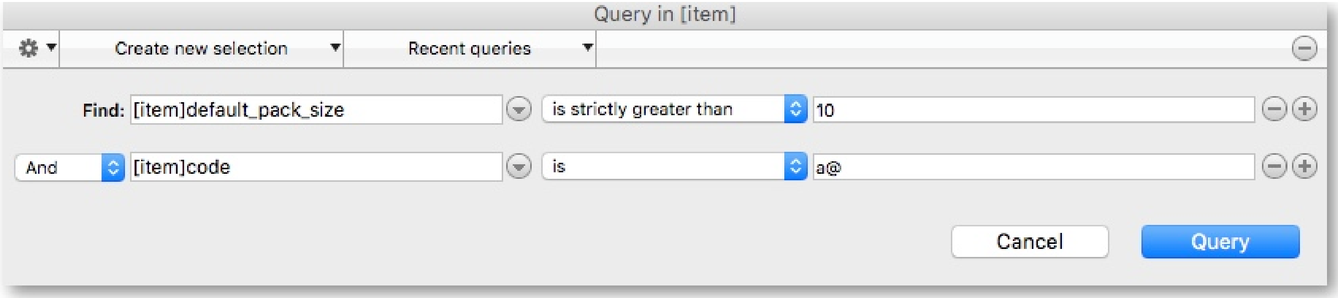
Within this window there are four areas from which you have to choose or set a value for each line of a query.

1. Available fields, select the field that you are looking for
2. Operands, select the operand that is appropriate for your search
3. Value, enter your specific criterion
4. For queries with more than one criterion, click *Add line*, then complete as above but also with the appropriate conjunction

For example, if you want to find all items whose default pack size is greater than ten and whose code starts with **A** these are the required steps:

1. Click on *default_pack_size* in the available fields list
2. Click on *is strictly greater than* in the Comparisons list
3. Enter `10` in the value field
4. Click the *Add line* button
5. Scroll down the available fields lists then click on *code* in the available fields list.
6. Click on *is* in the Comparisons list
7. Enter a@ in the value field (note the wildcard character @ has been used to find all items whose code has **a** as the first character)
8. Click the *Query* button to perform the query

Before step 8, the window would look like this:



The upper area of the query editor shows a summary of the query that is about to be performed.

This example will return a list of items where both the search criteria are met because the conjunction *And* was used. If you wanted to find items that matched only one of the criteria entered, you would click on the second line in the large upper panel to select it, and then click on the *Or* button where the conjunctions are displayed.

Saving and Using saved queries: If you have spent time on developing a particular query, and you are likely to use the same query in the future, click the *Save…* button. You will be asked to choose a name and location to save the query. The saved file is very small.

Then when a blank query window is first shown, you can click the *Load…* button and locating the saved query.

Thanks for working through the tutorial. We hope you learnt something useful, and now feel confident to start using mSupply!

Previous: ***3.10. Entering quotations*** | | *Next:* ***3.12. Where to now?***

5.01. Names: using, adding and editing

About names

In mSupply a “name” is one of these:

- customer: a recipient of your goods
- supplier: someone who sends your store goods
- manufacturer: someone who makes the goods that you receive, store and distribute
- donor: an entity that donates goods to you (you can track donated stock)
- patient: someone you dispense goods to
- others: you'll find other types e.g. benchmarks mentioned through out the documentation

A name can also be more than one (or all!) of these at the same time.

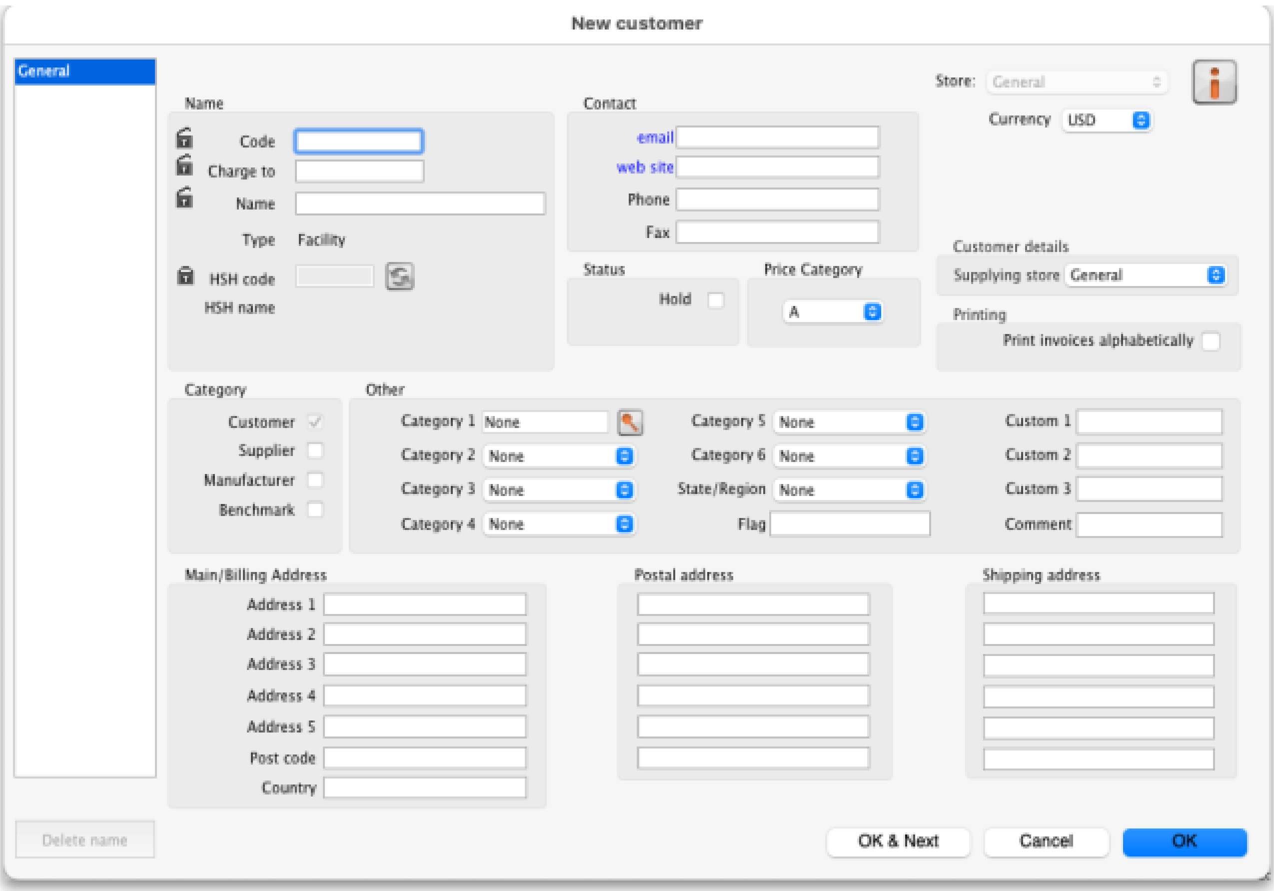
Adding a customer, supplier, manufacturer, donor or benchmark

Adding a new customer

In a multi-store system, you will quite likely not want the new customer to be visible to every store. By default, mSupply will make a new customer visible only to the store that you are logged in to when you create the customer. This store will be made the Supplying store. Make sure that you are logged in to the supplying store before proceeding.

To add a new customer:

- Log in to the supplying store
- Choose *Customer > new customer* from the menu.
- The form shown below will come up.
- The customer checkbox will be checked and disabled (from editing).



Names can also be mSupply stores - refer Virtual stores. Customers that are *not* stores are **Facilities** - refer to the Name type, just under the **Name** in the screen-shot above.

Adding a new supplier

- To add a new supplier, choose *Supplier > New supplier* from the menu (makes sense really!)
- The window will look the same as for adding a customer, except the supplier checkbox will be checked and disabled (from editing).

Adding a new manufacturer

- To add a new manufacturer, choose *Supplier > New manufacturer* from the menu.
- The window will look the same as for adding a customer, except the manufacturer checkbox will be checked and disabled (from editing).

Adding a new donor or benchmark

- Select *Customer > New customer* or *Supplier > New supplier* from the menu.
- The same window for adding a new customer or supplier will open and you should check the *Donor* or *Benchmark* checkbox in the Category section.

Fields in the names entry window

Name Code

The unique code to identify this customer, supplier or manufacturer.

Charge to

mSupply is made to work in tandem with an accounting program (although it will also function just fine by itself). The "Charge to" code is what is exported with each invoice. Generally you should make the charge code and name code the same (If you want, there is an option in the Preferences > Misc tab to make sure this is the case). For example:

- If you have 3 hospitals you supply, but you send the bills to one centre for payment, you may want to enter each hospital with its own name code, and all of them with the same charge code. In your accounting program you would just enter one debtor (customer) with a code the same as the charge code. eg.

Customer	Name code	Charge code
Fred H Hosp	fhhosp	bluehos
Mary P Hosp	mphosp	bluehos
Sam Q Hosp	sqhosp	bluehos

- In your accounting program you would enter "Blue Hospitals Assoc" with the code "bluehos"
- For a supplier, if you have entered a default currency and margin these will be entered, but you can override them. Every supplier should have its currency entered (The currency it uses for your invoices). If the currency isn't yet in your system, close the name entry window and choose *Currencies* from the *Special* menu to add it.

- if you do not wish to use different name codes and charge codes, check the “supplier name code and charge must match” and “customer name code and charge must match” check boxes in the mSupply Preferences. If you do this, the charge code will automatically be identified with the name code.
- spaces are not allowed in name codes and charge codes

Either the “customer” or “supplier” check box will be checked as appropriate, depending on whether you have chosen “new supplier” or “new customer” from the menus to produce this window. However, you can still alter things here without upsetting mSupply.

Name

The customer/supplier name. (Remember you can use the *Tab* key to move from field to field)

If there are non-printable characters before or after the name, code or charge code they will be removed. Any non-printable characters in the name, code or charge code will be replaced with an underscore (_).

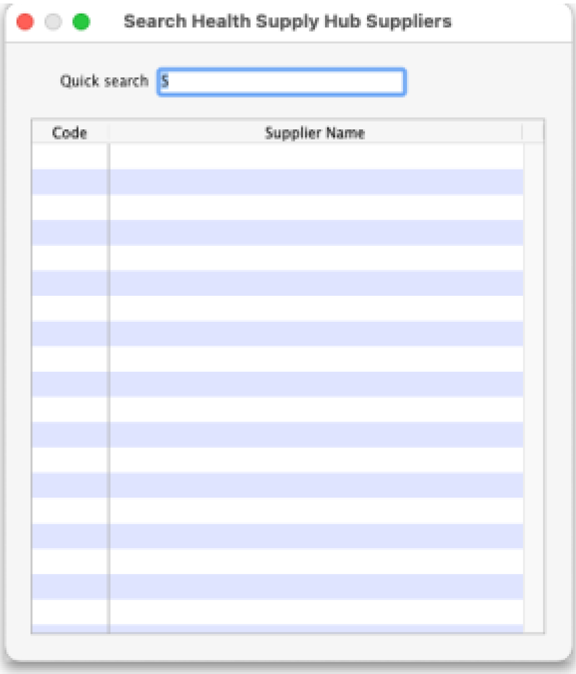
HSH code & HSH name

These are used when using the Health Supply Hub (replacement for the Remote tender module - see the Health Supply Hub page for details) to link suppliers or manmufacturers with their record on the Health Supply Hub server and maintained by The mSupply Foundation. If your system does not use the Health Supply Hub, then you can ignore these fields.

To link a supplier or manufacturer to one already entered in the Health Supply Hub:

1. set your Health Supply Hub preferences (16.01. General preferences)
2. click on the padlock icon next to the **HSH code field** to unlock it and enable the button.
3. click on the button.

mSupply will then search for a supplier or manufacturer (depending on whether the name is a supplier or manufacturer in mSupply) in the Health Supply Hub with a name having the same first letter. A window like this opens:



If the correct supplier or manufacturer is not shown in the list then clear the contents of the **Quick search** field. All suppliers or manufacturers registered on the Health Supply Hub are then displayed. You can refine the search by typing something in the **Quick search** field and only suppliers/manufacturers with names that begin with what you typed will be displayed.

When you see the supplier/manufacturer name that you wish to connect to the supplier in mSupply, double-click on it to select it; the Health Supply Hub code of the supplier/manufacturer will be put in the **HSH code** field and the supplier/manufacturer's Health Supply Hub name will be shown in the **HSH name** field.

It the search is unsuccessful or there is a problem connecting to the Health Supply Hub, you will be shown an appropriate message.

Note: if the name you are trying to link to the HSH is a customer then you shown a message telling you that linking it to a supplier or manufacturer in the Health Supply Hub is not possible.

Type

In the main entry screen, there are 4 check boxes to mark each entry as a customer, a supplier, a manufacturer and an additional *Benchmark* category. This last category is a feature of the Tender Management module, and is fully explained in that section, under Using Benchmark prices

Status - Hold checkbox

If this is checked this name is not visible to any store and can not be a supplier or customer.

Donor checkbox

This is applicable to suppliers only. There are a few situations in which this box should be checked:

1. If this supplier/organisation provides goods free of charge (either in whole or in part).
2. If this supplier/organisation provides funding (either in whole or in part) for purchasing.

Price Category

Selection of any of the categories will fix a certain price margin for that Supplier or Customer.The price category value is entered in *File >Preferences > Prices* . When goods are being issued to this customer, the selling price is increased/decreased by the percentage specified in the Preferences for this price category.

- Eg: Consider customer XYZ, who is in category B, and in the preferences category B is assigned a value of 50. If an item is issued to customer XYZ with a normal selling price of $10, the selling price on this invoice will be $15.

Address and contact details

These should be completed with relevant details

- For customers, you can enter separate delivery and billing addresses as necessary.

Other section

Categories

These category fields are used for reporting and are available for you to make whatever entries are appropriate in your situation. For example, you might wish to subdivide your Hospital category by number of beds, or your Clinics by the number of patients seen daily, etc. Or you may wish to identify your customers by their geographical location (region, district, state etc.) or by location type - urban, city centre, rural, remote, etc. The choice is yours - the main point to remember is that these fields are searchable, enabling you to produce reports relating to very specific criteria.

- There are 6 category fields available for selecting as required.
- Each category has its own drop down list containing the categories which have been defined using the menu item **Supplier > Show categories…** or **Customer > Show categories…** (see Name Categories for more details).
- The labels of these 6 categories can also be changed in the preferences (see General preferences, Names tab for details).

Custom fields

Custom fields are similar to Category fields, the main difference being that these fields are not validated using a drop-down list, and so can't be reliably used for categorisation.

Analysis

You can use this field to group together certain types of customers or suppliers. You can filter the report by selecting the group in the *Analysis* field.

Postal address

Here you can enter a postal address if it is different to the physical address of the supplier.

Supplying store

As of mSupply versions (Mobile and Desktop) released since 2019, the concept of a **Supplying store** is less relevant than it was. The feature is still active, can be utilised with custom code, and is the default store for internal orders are if this customer becomes a stoer in its own right.

Extra information for customers only

Shipping address: If the name is a customer, shipping address fields will be shown.

Extra information for suppliers only

Currency: Enter the currency code of the currency this supplier uses for invoicing you.

Margin: Enter the percentage margin to apply to items received from this supplier.

Freight factor: Enter the amount to add to quotations from this supplier to adjust quoted prices for freight. For example: a physical check on invoices from IDA reveals that freight to Nepal generally amounts to about 15% of the net value of the invoice. Therefore we would enter “1.15” in this field for IDA. Note that if suppliers quote you “CIF” prices, then you should enter “0” here.

About manufacturers

When you are receiving goods, you can optionally specify the manufacturer of each item. Manufacturers can be chosen from a list that is made up of names which have the *Manufacturer* checkbox checked.

For the manufacturer field to be shown, the option must be turned on:

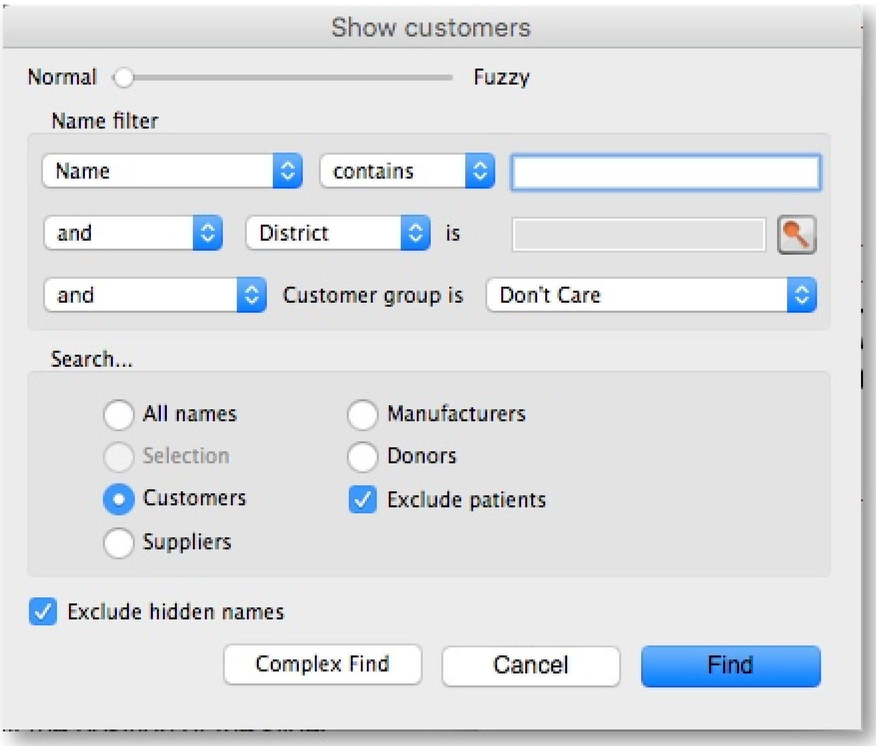
- **Special > Show stores > [choose your store and double-click] > Preferences tab**
- Check the **Able to specify manufacturer when receiving, ordering or quoting for items** checkbox

Editing a customer, supplier or manufacturer

Finding a name

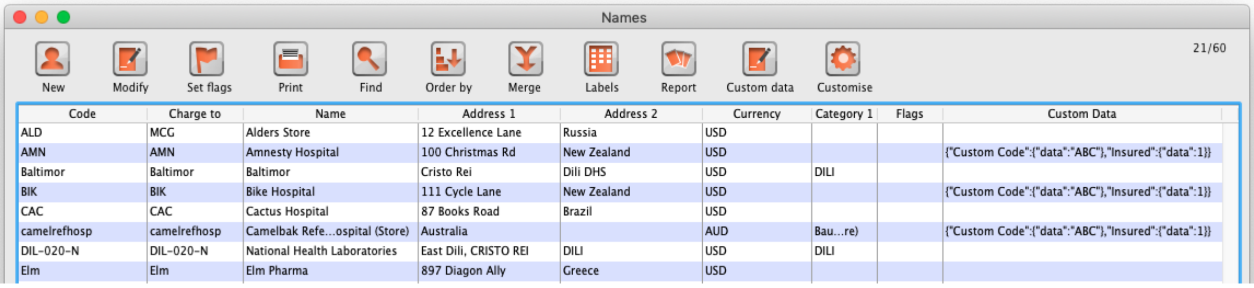
Before you can edit a name, you have to find it and display its details! For this example we will edit a customer. Editing a supplier is just the same, except that you start by choosing *Show supplier* from the *Supplier* menu.

Choose *Customer* > *Show Customer*. You are presented with a window to enter as much of the Customer name or code as you know:



- The **slide bar** at the top of the window may be set to Normal, at the left, or at intermediate points towards the Fuzzy end (right); this determines the accuracy of matching your entry; when set to Normal, the search will only match exactly what has been entered; when set at Fuzzy the search will list entries which are approximate matches to what has been entered. The accuracy with which the list matches the entry is determined by the position of the slider.
- If you leave the **Name/Code** text field empty, clicking the **Find** button will produce a full list of all customers.
- You can enter values for the other filters too (or them only!) if you want to refine your search.
- Note that the window has a series of radio buttons to select the target of your search - *All names*, *Customers*, *Suppliers*, *Manufacturers*, etc. So even if you start this search from, say, **Customer > Show Customers…**, by selecting the *Suppliers* radio button, you can search in suppliers rather than customers.
- The **Exclude patients** checkbox is checked by default and means that any patients you have in your datafile will not be included in the search. If you uncheck it, any patients in the current store will be included in the search.
- The **Exclude hidden names** checkbox is checked by default and means that any names hidden in your store (but probably visible in other stores) will not be included in the search. If you uncheck this box then the search will include all names in all stores, and their visibility will be ignored.

If the search finds only one name that matches the filter criteria you entered, its details window will be displayed. If more than one name matches then you are shown a list of them all



Code	Charge to	Name	Address 1	Address 2	Currency	Category 1	Flags	Custom Data
ALD	MCG	Alders Store	12 Excellence Lane	Russia	USD			
AMN	AMN	Amnesty Hospital	100 Christmas Rd	New Zealand	USD			{"Custom Code":{"data":"ABC"},"Insured":{"data":1}}
Baltimor	Baltimor	Baltimor	Cristo Rei	Dili DHS	USD	DILI		
BIK	BIK	Bike Hospital	111 Cycle Lane	New Zealand	USD			{"Custom Code":{"data":"ABC"},"Insured":{"data":1}}
CAC	CAC	Cactus Hospital	87 Books Road	Brazil	USD			
camelrefhosp	camelrefhosp	Camelbak Refe...ospital (Store)	Australia		AUD	Bau...re)		{"Custom Code":{"data":"ABC"},"Insured":{"data":1}}
DIL-020-N	DIL-020-N	National Health Laboratories	East Dili, CRISTO REI	DILI	USD	DILI		
Elm	Elm	Elm Pharma	897 Diagon Ally	Greece	USD			

Buttons in the names list window

New

This button allows you to enter the details of a new customer

Modify

This button opens a window displaying the details of the highlighted customer, allowing their details to be modified.

Set Flags

This button allows you to mark certain names with a flag.

- First, highlight the names you wish to flag by holding down the control key (command on Mac) and clicking the names in the list you wish to use. Then click the Flags button to show a window where you can enter the flag you wish to add, and decide whether to replace any existing flags or append the new flag to the old one.

> The Flag field can be no more than **16 characters** long when set this way. It can be longer when set manually.

Print

Clicking this button will print a list similar to the one displayed on screen.

Find

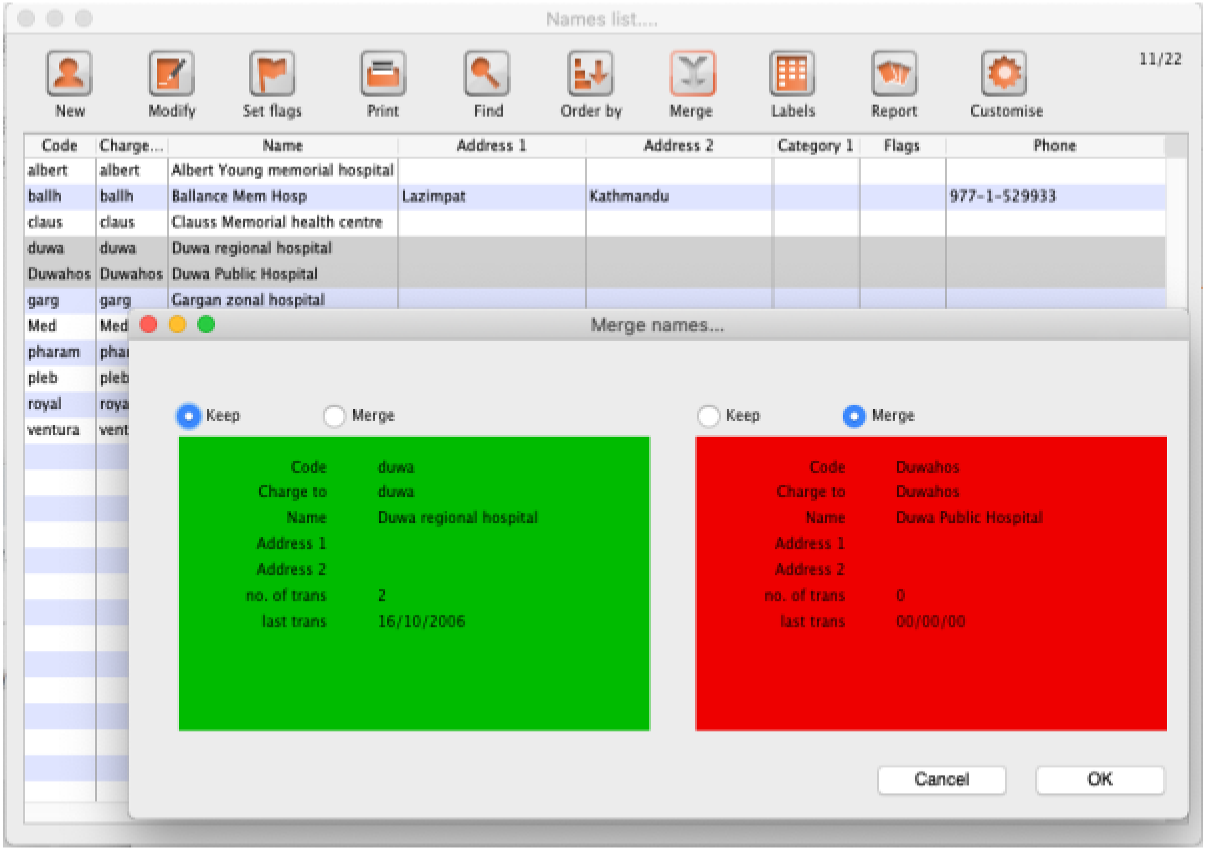
This button shows the same find window as choosing the menu item did so you can find a different group of names.

Order by

This button allows you to sort the displayed list by the criteria you choose. The Labels and Print buttons will use the order that is displayed. By default, names are displayed alphabetically based on the name column.

Merge

This button allows two customers to be merged into one; highlight the two entries click on the Merge button to display this window:



Choose the record you wish to keep and click on *OK* ; the data from the deleted record is then merged with the data of the record being kept. If you change your mind, click on the *Cancel* button, and the merger will be cancelled.

Labels

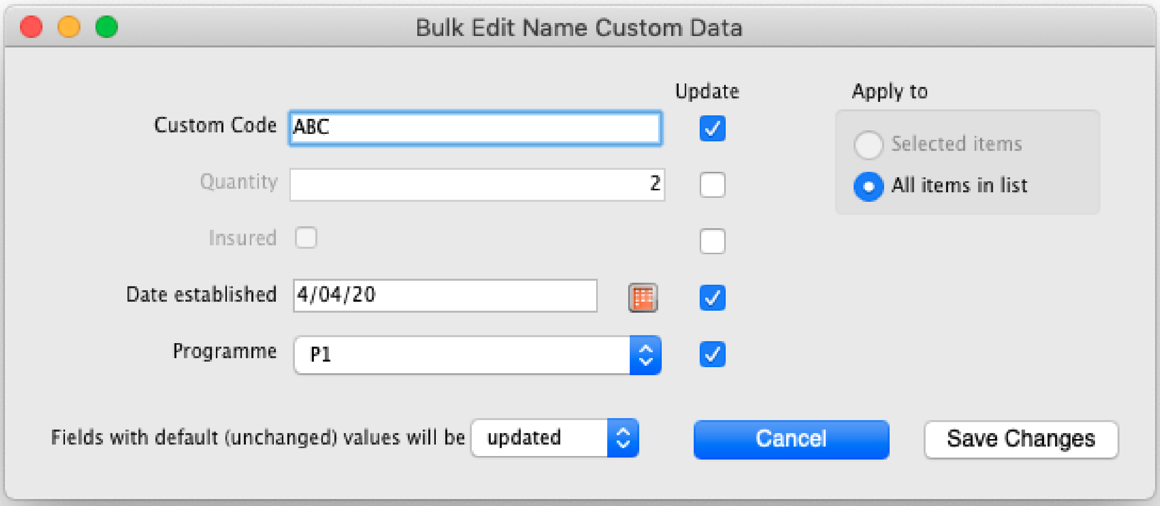
Clicking this button allows you to print address labels for the names in the list. The label editor is displayed.

Report

Click on this icon to open the Quick Report editor window. Use of the Quick Report is discussed elsewhere in the guide. See Custom Reporting Tutorial

Custom data

This allows you to bulk edit the Custom data fields associated with the displayed names. An editor window like this will be displayed:



Only fields with their checkbox selected in the “Update” column will be modified. Note that you have the option to apply the changes to **all** names currently displayed in the list or only ones that you have **selected** before opening the editor.

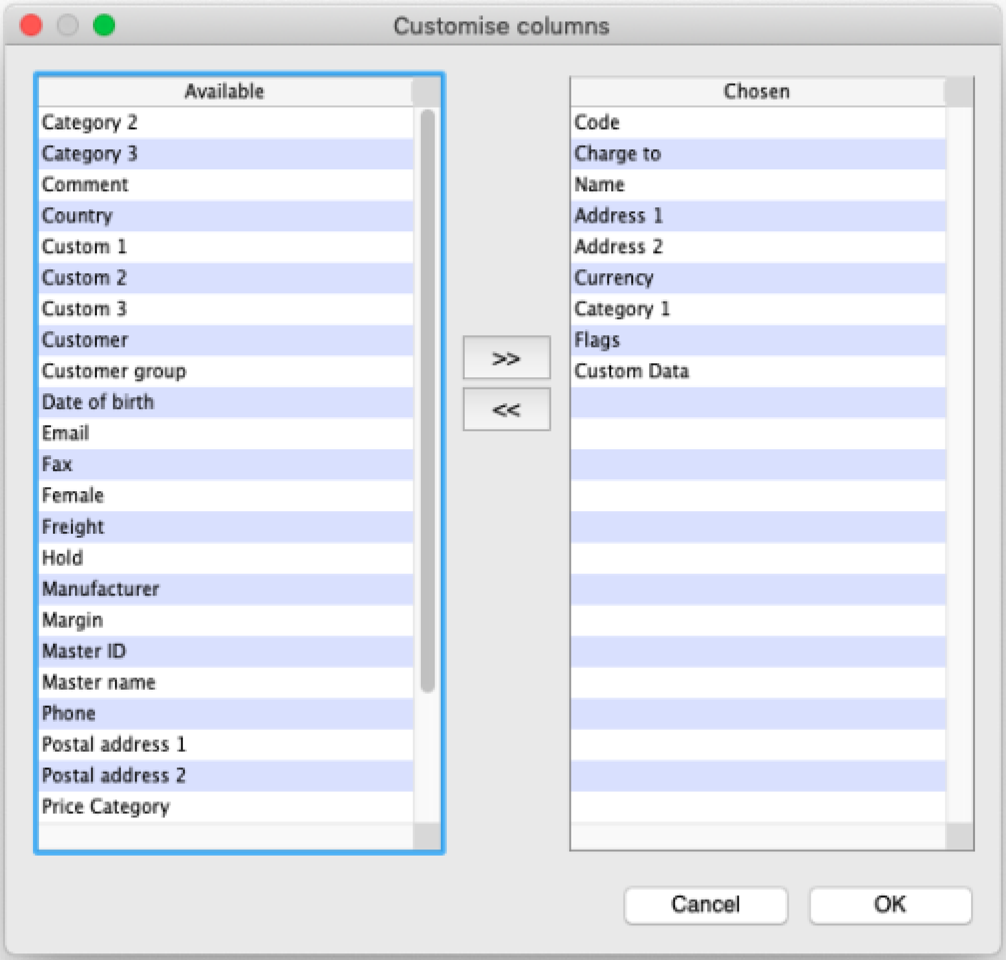
Click “Save changes” to apply. After confirmation and processing, you will see your changes reflected immediately in the *Custom Data* column of the names list. It is recommended that you have the *Custom Data* column displayed (see **Customise** below) before bulk editing custom data so you can clearly see which names have been changed.

If you want to remove certain fields entirely from the names, select the field(s)' “Update” checkbox, then switch the selector at the bottom so it says “Fields with default (unchanged) values with be *removed*” (instead of “*updated*”). Any fields you haven't changed from their default values (i.e. blank for text, 0 for numbers, etc.) will be removed upon saving. You can completely remove *all* custom data for selected/displayed names by selecting all “Update” checkboxes, leaving all values default, and choosing the “removed” option.

Make sure you know what you're doing when bulk editing as you can easily over-write a lot of data if you're not careful.

Customise

Allows you to choose which columns to display using this window (Note: this only affects the columns you see in this list, it won't affect what other users see):



Columns on the left are available. Columns on the right are the ones in use in your names list. Click a row in either column then click the move left or right button to transfer it to the other column. Click **OK** when you're done, or **Cancel** if you want to stick with what you've got. Your choice of columns to display will be remembered for the next time you display a list of names (customers, suppliers etc.).

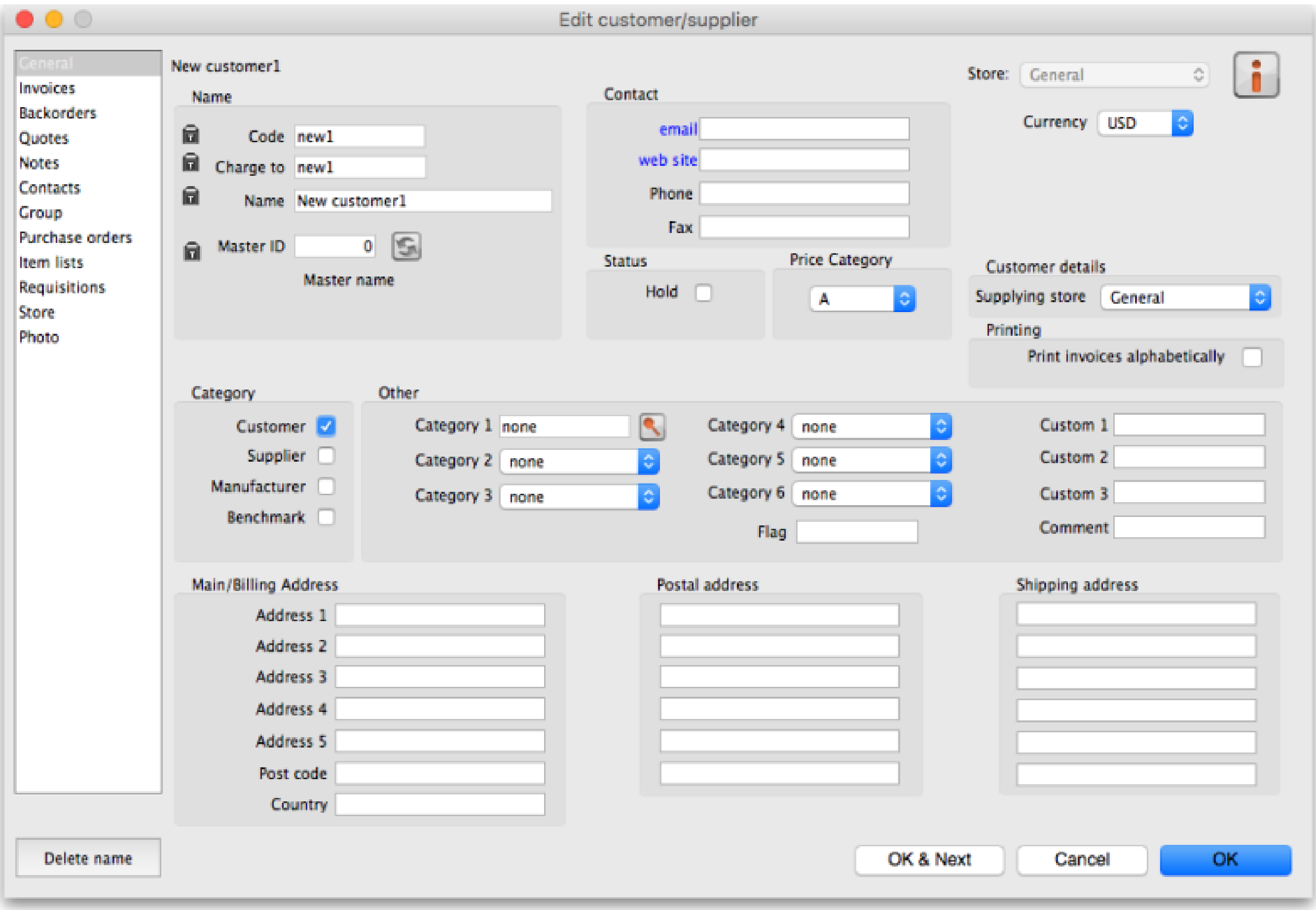
OK Button

Closes the window

Editing or viewing a name

To edit/view a particular name, if you are looking at a list of names double-click the name you want to edit on the list (no need to do this if you are already looking at the name's details page because only 1 name was returned from your search).

You will be shown the name's detail window which has a sidebar showing several tabs, *General, Invoices, Backorders, Quotes* etc. and opens at the *General* tab:



Edit any of the fields to the values you want. Note that fields with a padlock need to have the padlock unlocked (by clicking on it) first before you can edit the values. These actions are, of course, only possible if you have the appropriate permissions.

The **Main/Billing Address** fields will be disabled and not editable if the name beloings to a store. To edit these fields, do that on the store record. See the 26.07. Virtual stores page for details about this.

Deleting names

Click on the **Delete** button in the bottom left hand corner to delete the name.

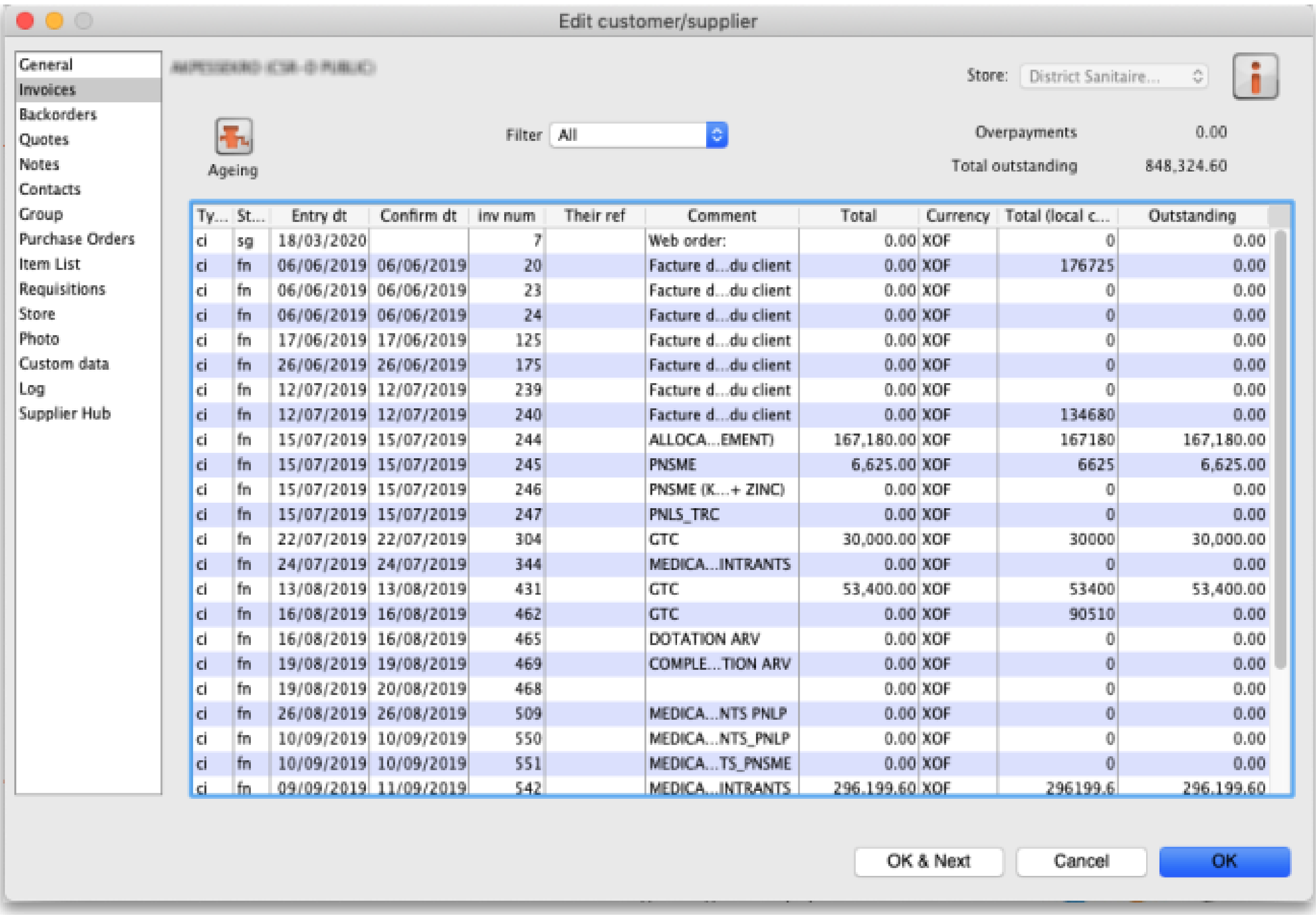
If a name has transactions entered against it, you will not be able to uncheck the relevant check box in the *Category* section, and you will not be able to delete it. For example, if a supplier has invoices entered against it, you will not be able to uncheck the **Supplier** check box, and you will not be able to delete the supplier.

Putting a name on Hold

If you wish to prevent future transactions with a name, change it's status to on 'Hold'.

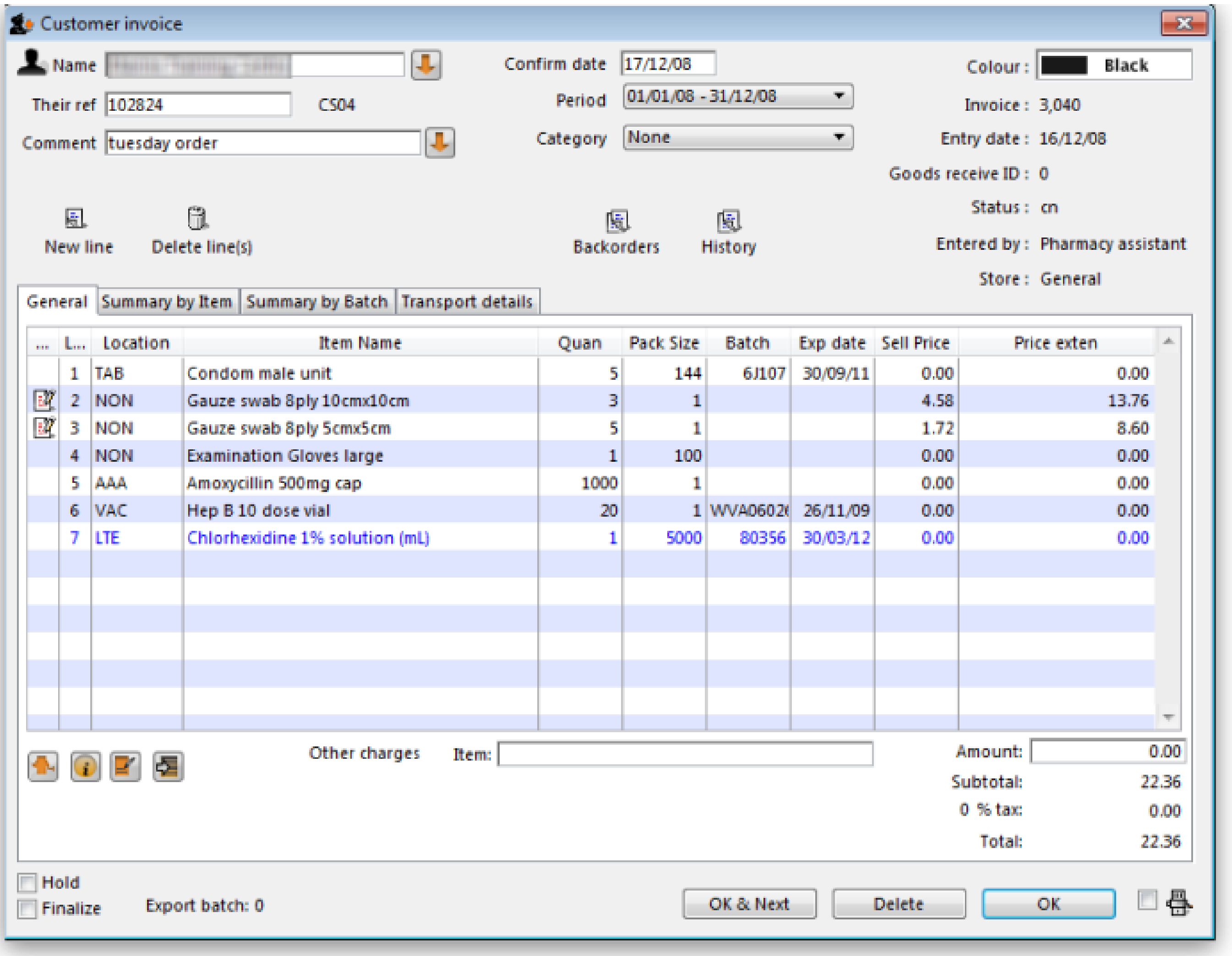
Invoices tab

Here you can view the invoices for a customer or supplier.



Note that the *Total outstanding* field shows a customer's payment balance and is only shown if the customer receipts module is turned on (see 11.02. Receiving payments from customers).

You are able to edit an invoice directly from this window by double-clicking the one you wish to edit. A new window will open with the invoice details displayed.



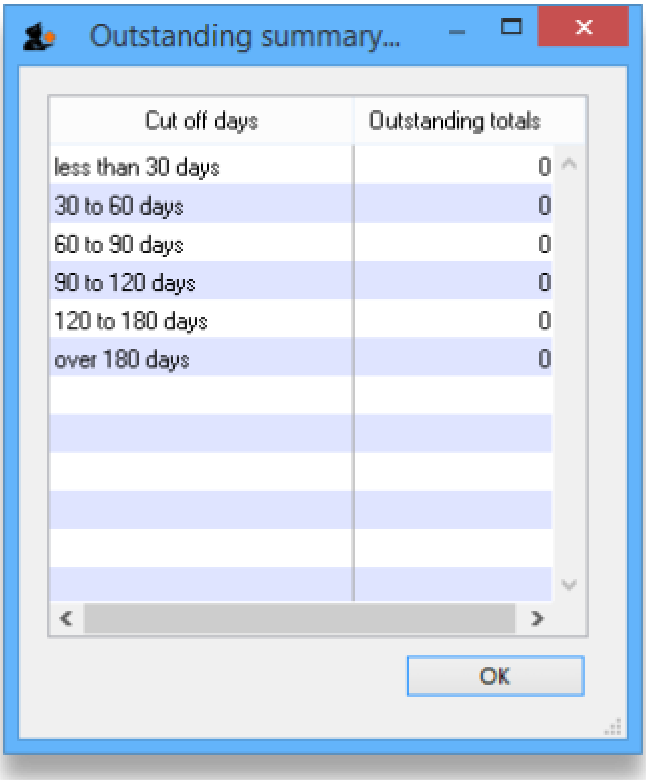
Buttons on the Invoices tab

Print Range

Click this button to print a range of invoices for a customer. You will be asked to enter the first and last invoice numbers to be printed.

Aging

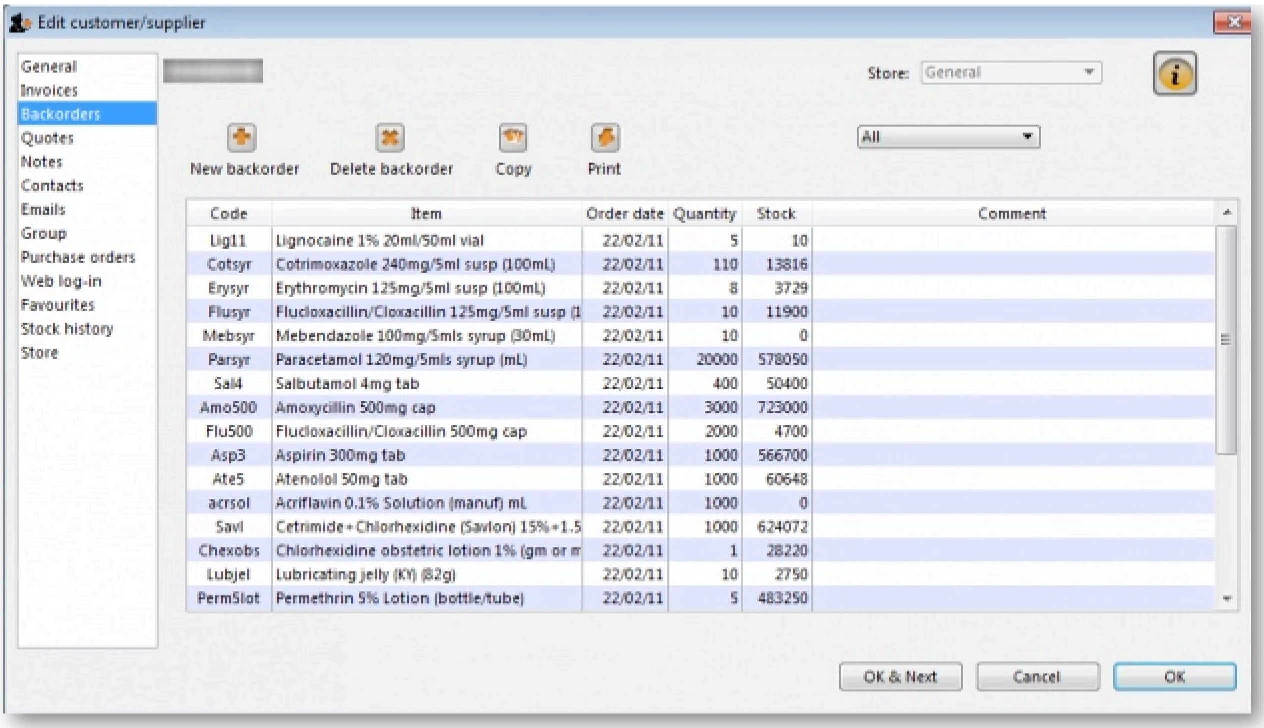
Click this button to display a list of aging categories and the outstanding unpaid balance for each invoice in each category.



Dates

Choose a date range from this menu to show quickly recent invoices, or to revert to showing all invoices

Backorders tab

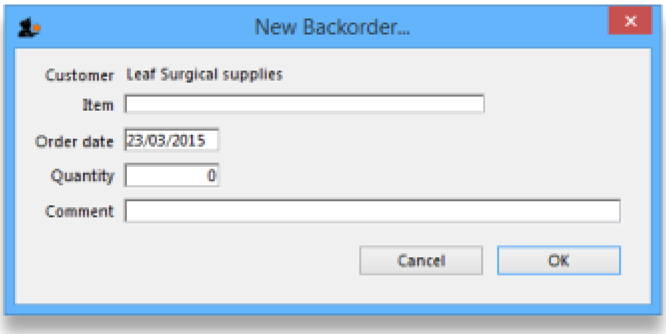


- Here you can view, add and edit the backorders for a customer. mSupply allows entry of backorders against suppliers as well, but we are not sure why you would want to do this!

Buttons on the Backorders tab

New backorder

Clicking this button presents you with a window where you can add a backorder line for this customer.



- Type at least a portion of the item code or item name, then press the Tab key.
- Today's date is automatically entered. You can change the date if you like
- Enter the total quantity owing.
- Enter a comment (e.g. an expected arrival date)
- Click *OK* to save changes and exit the window.

Delete backorder

Click a backorder line to highlight it, then click this button to delete the line. You can also select several at once (using *ctrl/cmd+click* and *shift+click*) or all the backorders in the list using *ctrl/cmd+a* and delete them at once as well.

Copy

This command copies the backorder to the clipboard, allowing you to paste the report into an email message, word processor or spreadsheet document.

Print

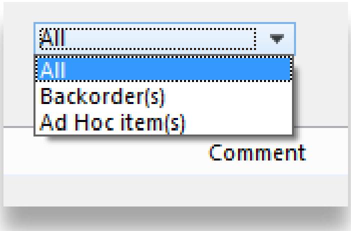
The list of backordered items for the customer is printed.

Viewing backorders

Double-click a backorder line to edit the line. You will be shown the backorder entry window, where you can change any details you wish.

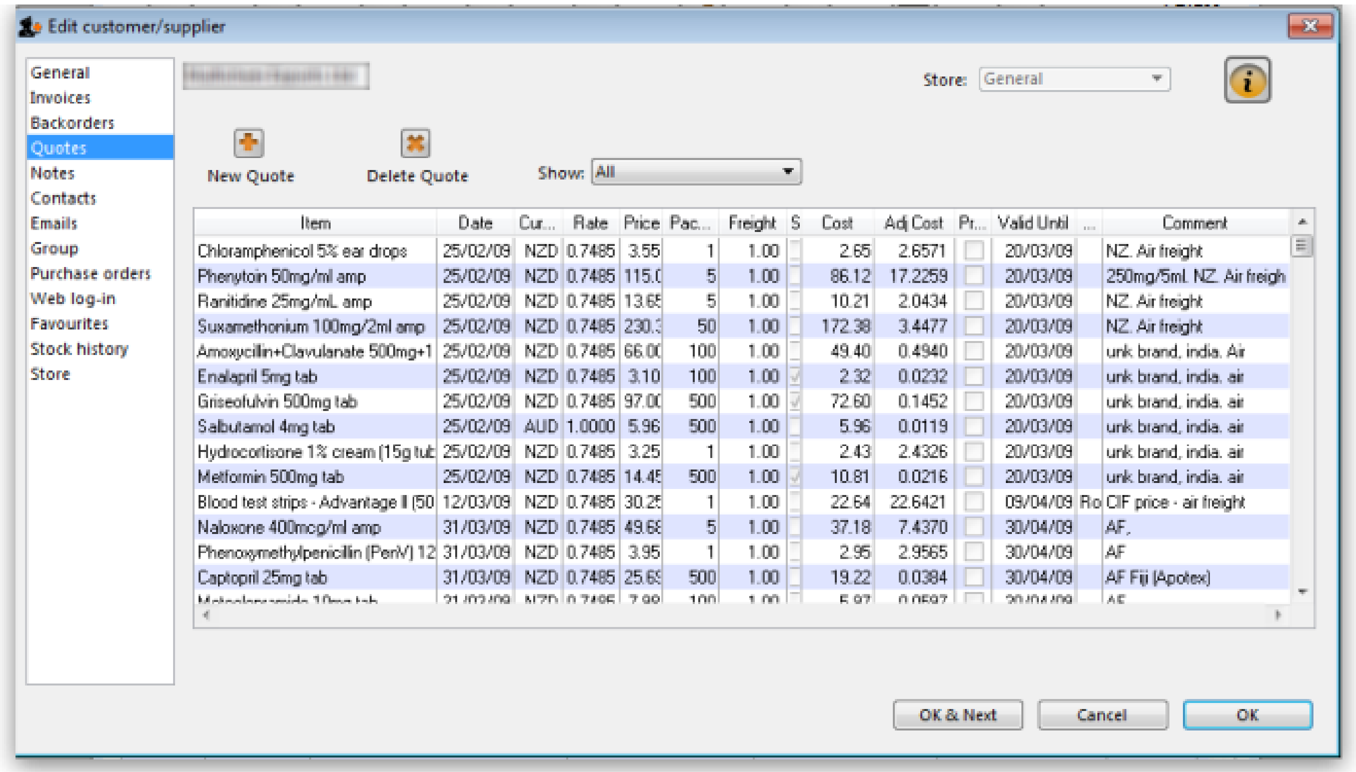
Show

This drop-down list allows you to choose which backorders to display.



- Backorders are normal items that have not been supplied to customers.
- Ad Hoc items are items that customers have ordered but which you do not want to add to your stock list, rather making a special order just for that customer.

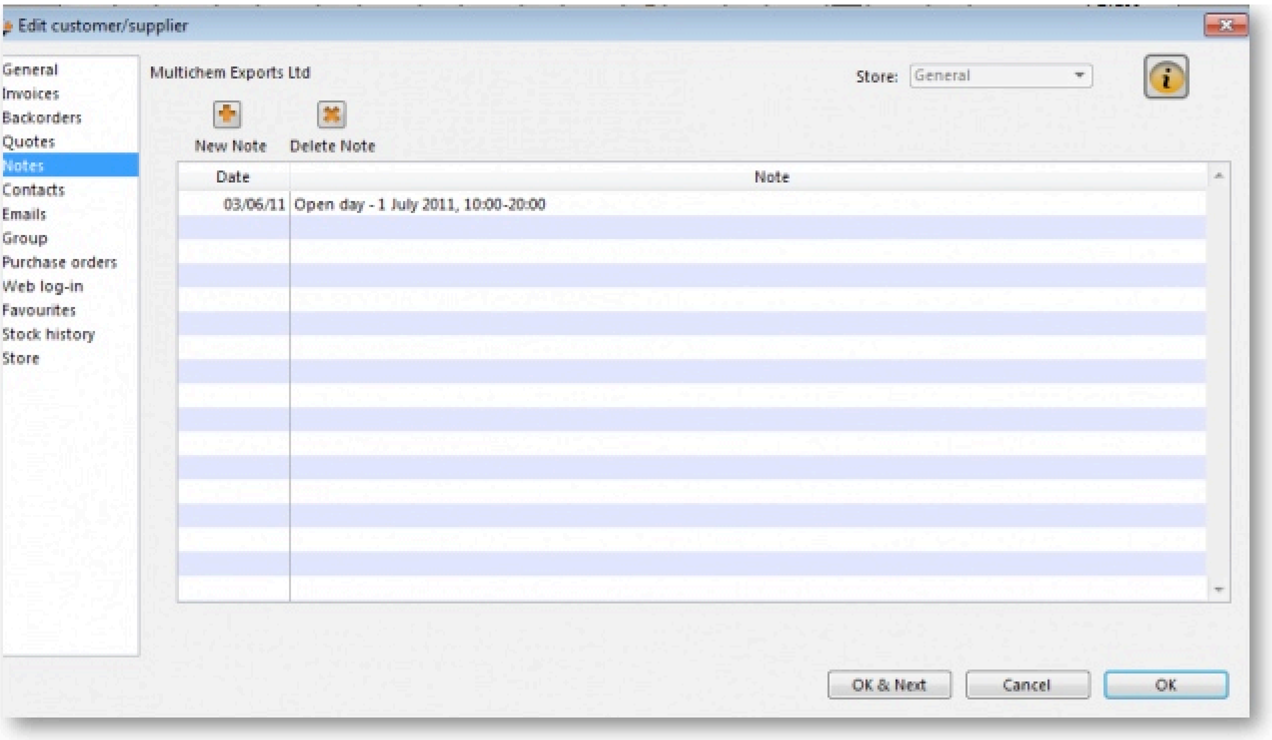
Quotes tab



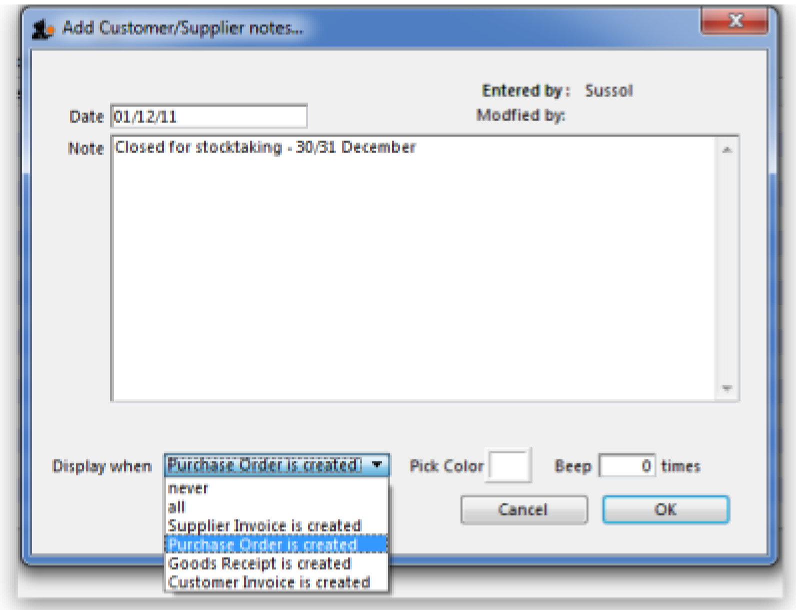
You can view the quotations you have entered in mSupply for this supplier.

Notes tab

To add, edit or delete a note, click on the *Notes* tab, and this window displays:



Click on *New note* to create a note, or select an existing note and double click on it to view, edit or delete it.



- The date on which you are entering a new note is already completed, and in the main panel you should type in the wording of the note itself.
- In the lower left of the window is a drop-down list offering various choices concerning the displaying of the note on screen; it may appear as an alert when a Supplier invoice is created, when a Purchase Order is created, etc..

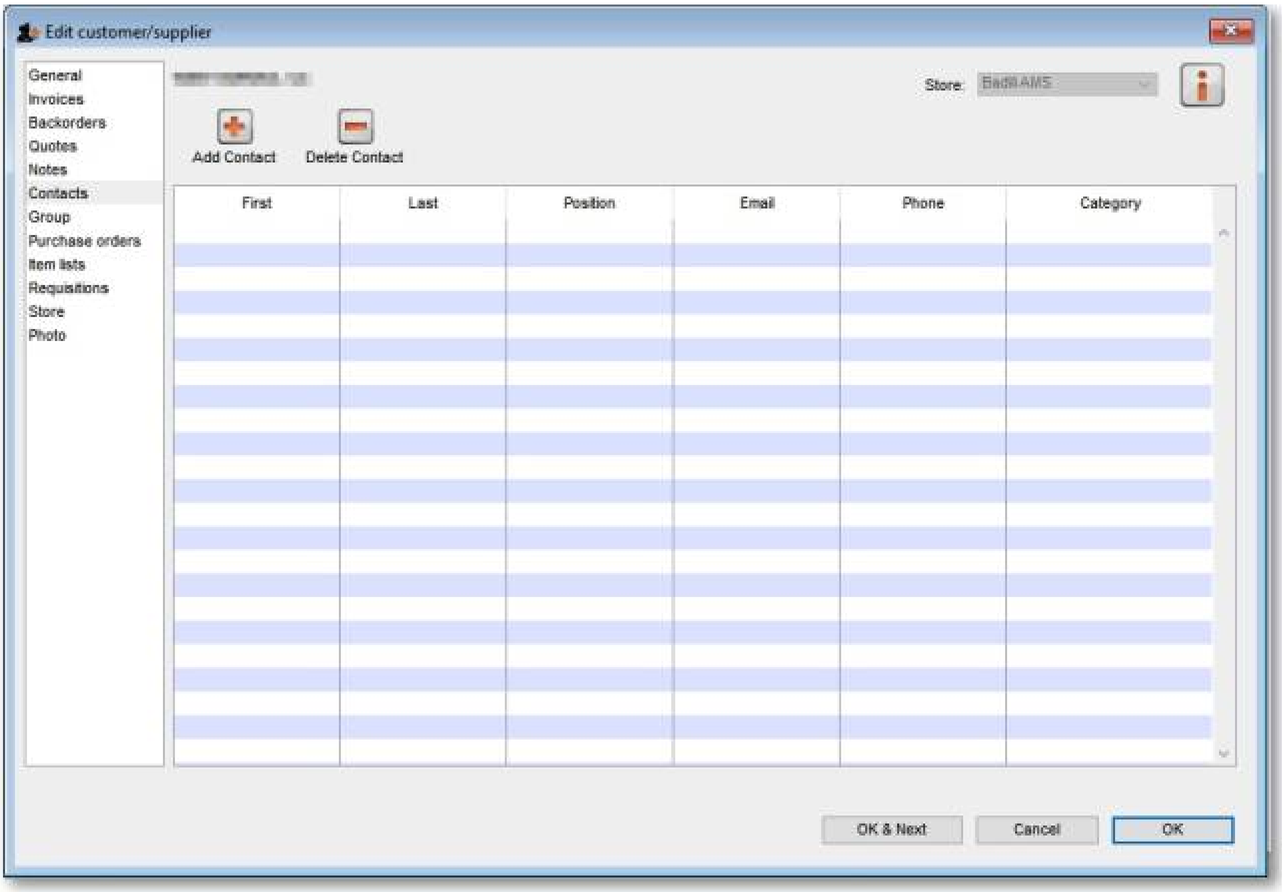
If **never** is chosen, the note will never be displayed on screen, and if *all* is chosen, it will display for all events for this customer/supplier. You may also set the background colour of the note , but as the text is always black, dark colours should be avoided. A further option allows you to have one or more audible `beeps' sound when the note is displayed. Each note will display according to the attributes set for it, independently of other notes defined for the same customer/supplier.

Subsequently, when this customer/supplier is selected and depending on the display settings made, the note will appear on screen. Be aware that the note does not disappear automatically - you must close it manually.

The text of a note can be up to 32,000 characters.

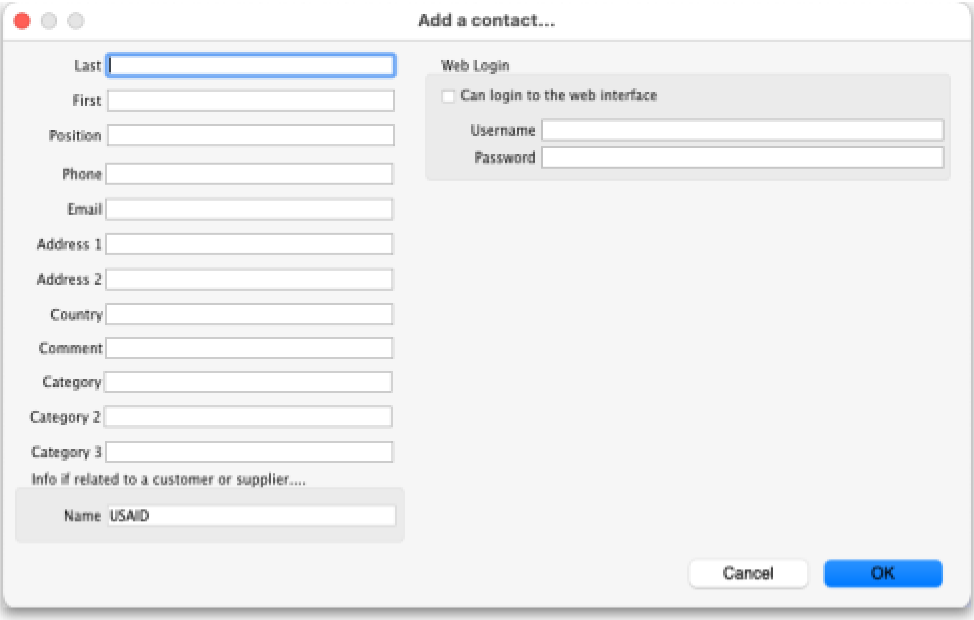
Click **OK** when you are finished.

Contacts tab



Adding a contact

To add a contact for this customer or supplier, click the **Add contact** button, then enter the details in the window that appears:

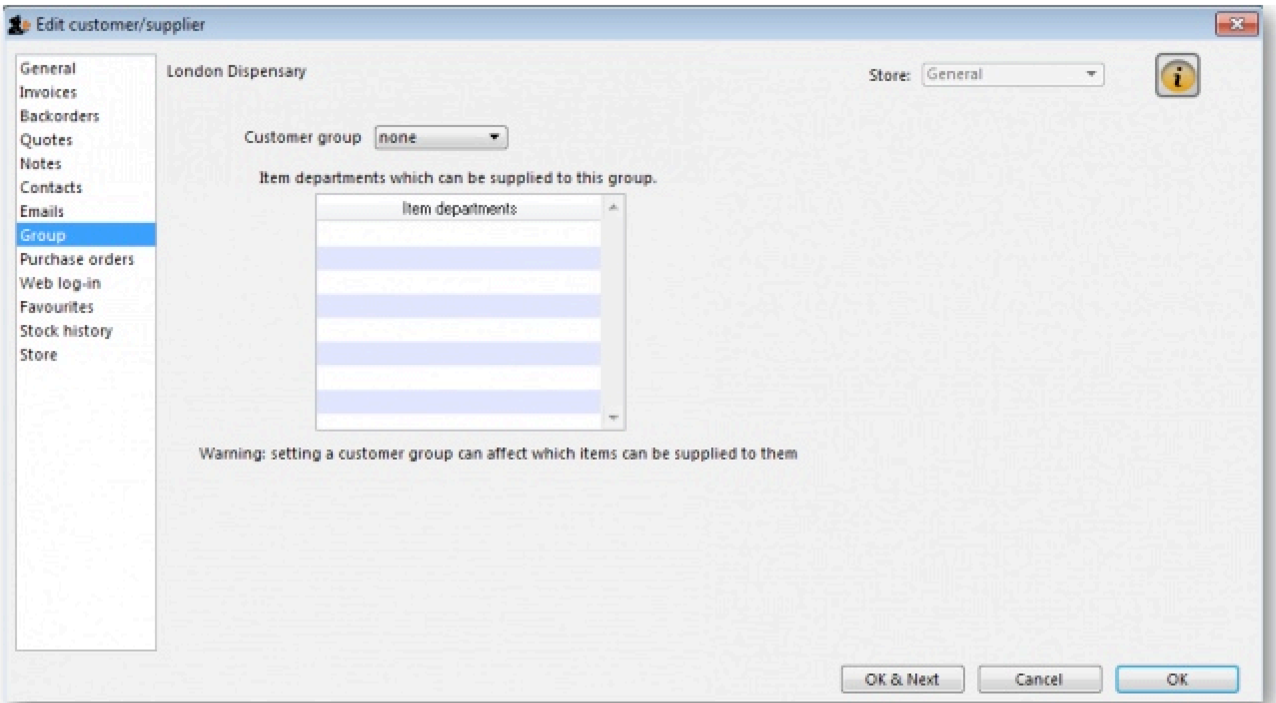


- Info if related to a customer or supplier textbox: read only. Shows the name of the customer or supplier this contact belongs to. Will be empty if this contact does not belong to a name.
- Web login: in this section you enter the authorisation details that this contact will have if it is used for accessing the REST API or one of mSupply's web interfaces. See the 19.03. mSupply customer web interface and 19.09. mSupply REST API pages, for example, for more details.

Deleting a contact

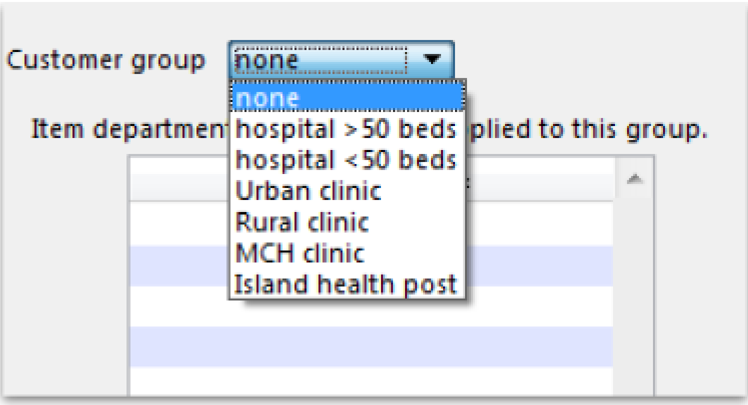
To delete a contact, click on the contact you wish to delete, then click the **Delete contact** button.

Group tab



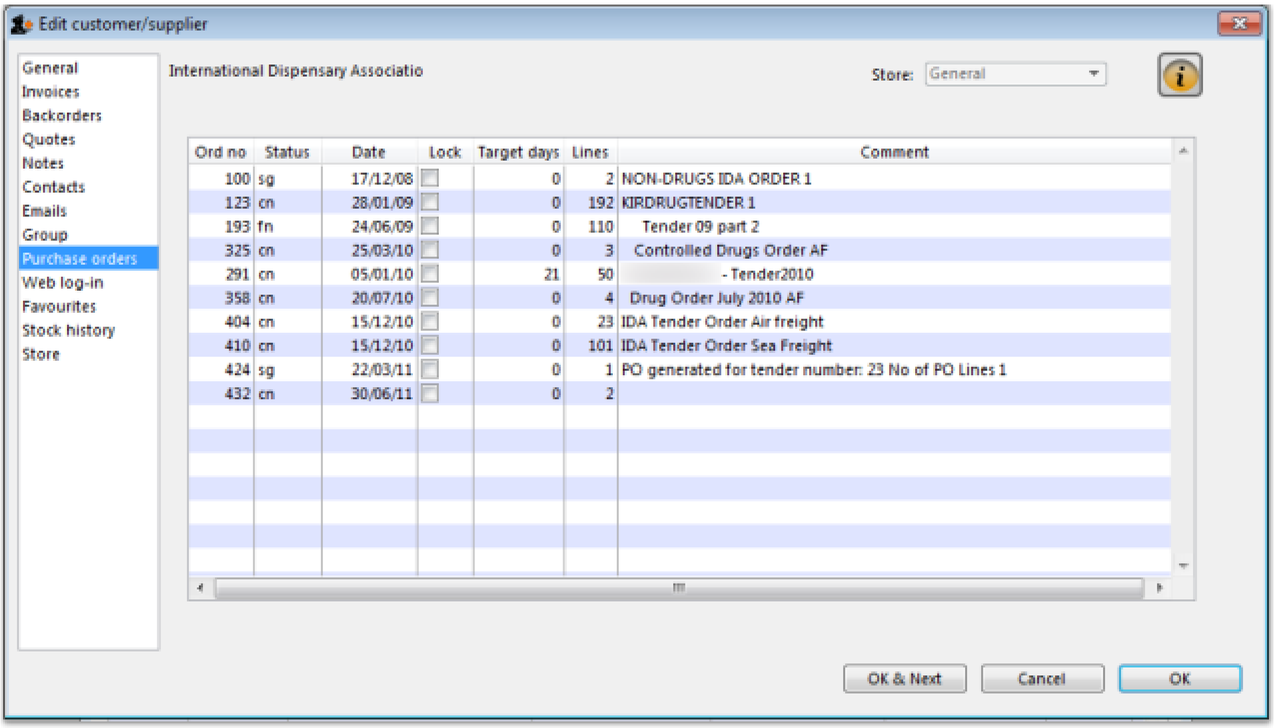
Groups are only relevant to customers, not suppliers.

If this customer has been added to a group, this tab displays the name of that group. An explanation of groups and how to work with them is here: Show groups...



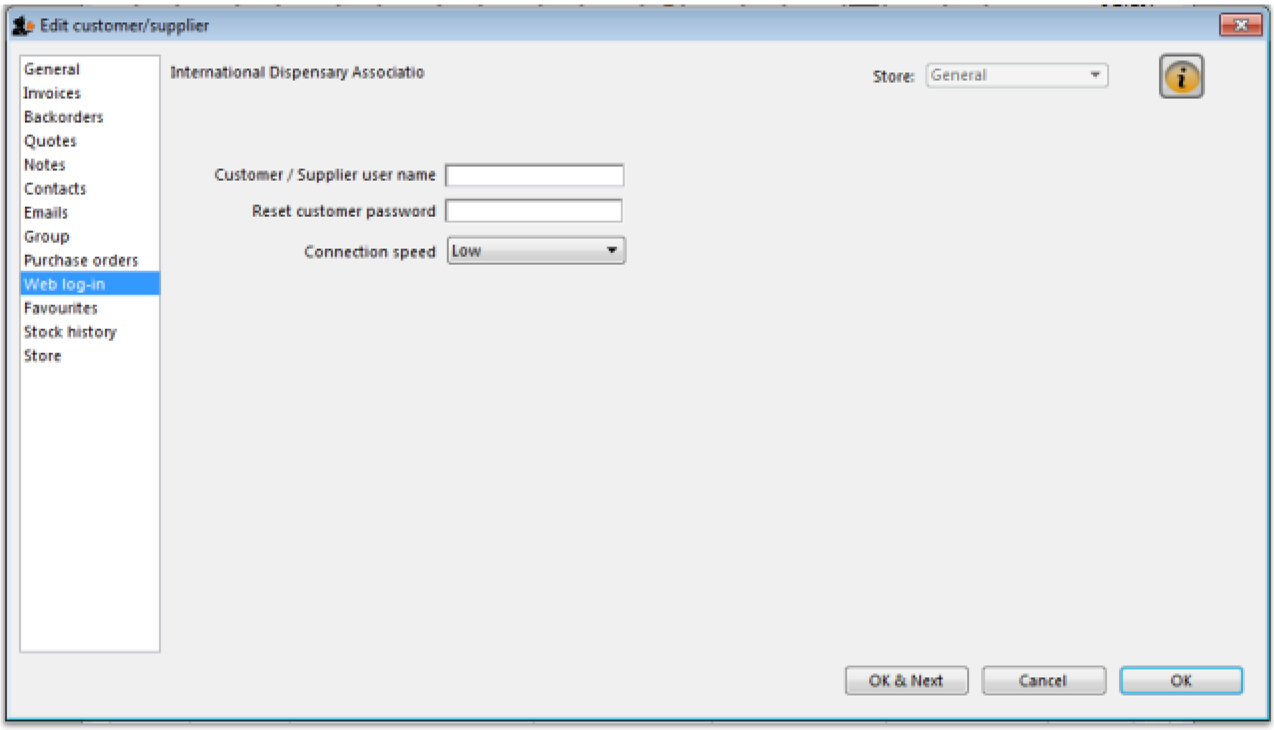
Here you can select the group of which a customer is a member. When you choose a group, you will be shown a list of item departments which are linked to the chosen group. Once the group system is activated in the Preferences, only items belonging to one of the listed departments (or items with no department) may be supplied to that customer.

Purchase orders tab



This tab shows a view of Purchase Orders for the current name, and applies to suppliers only.

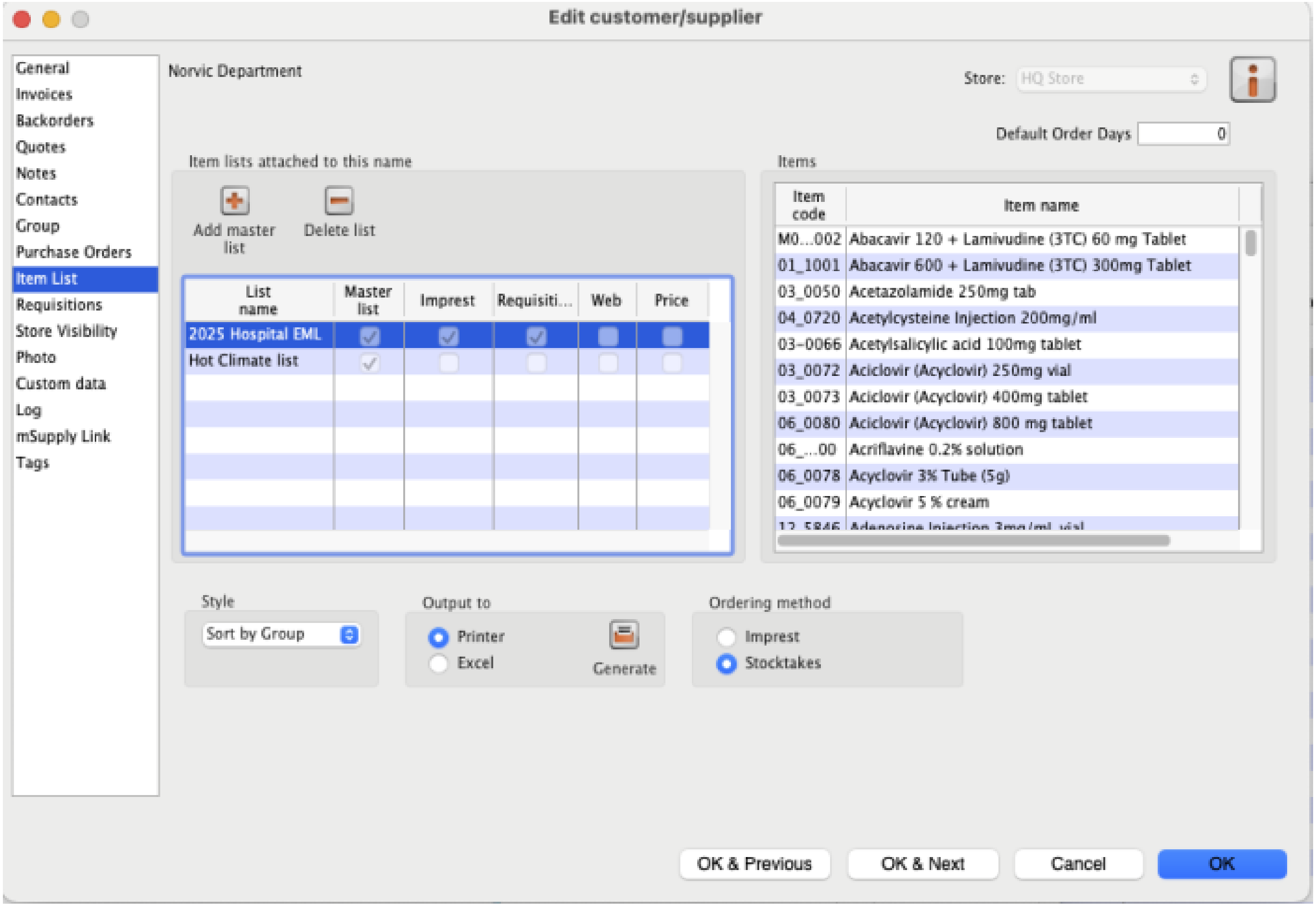
Web log-in tab



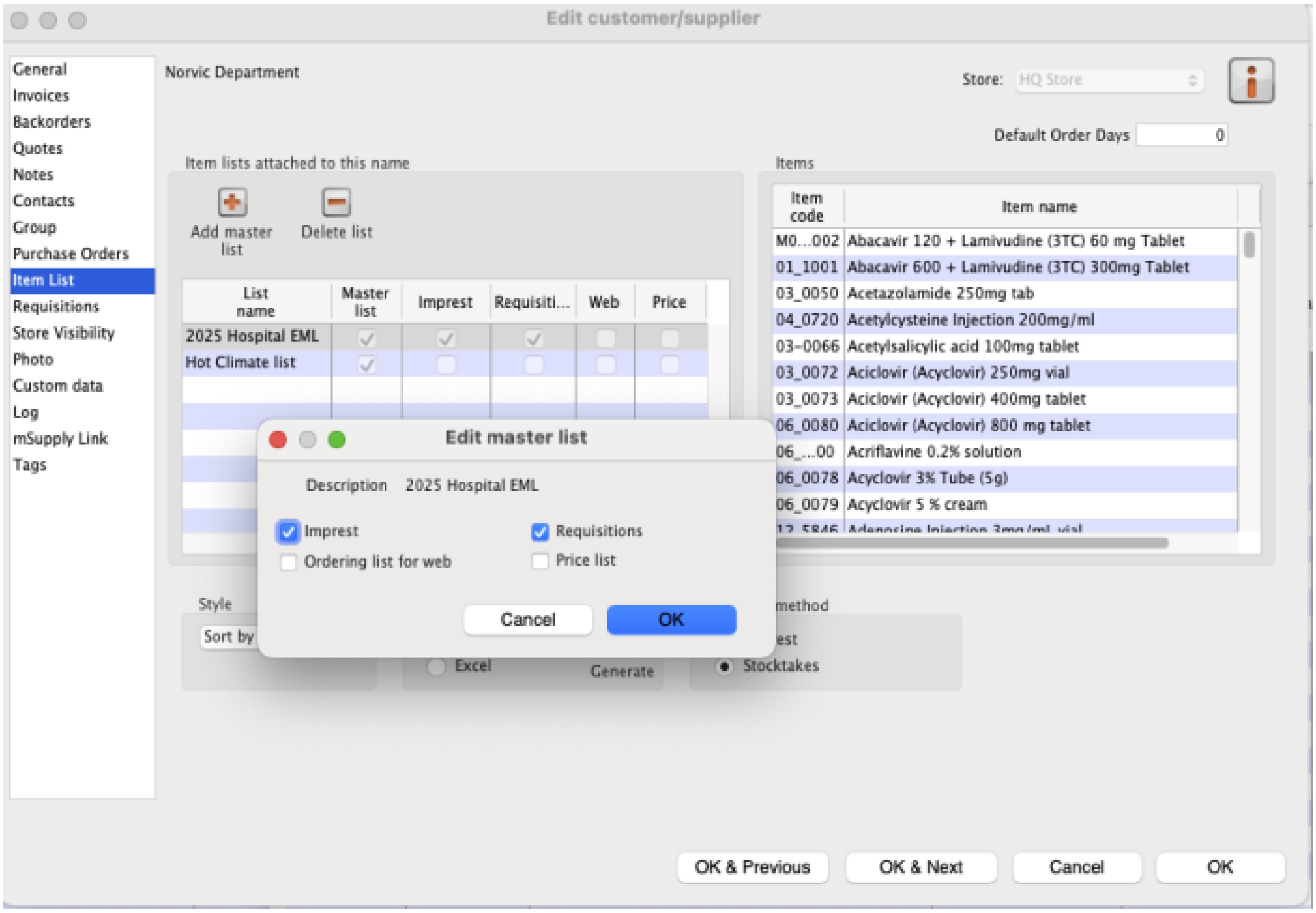
If you are allowing customers to access their order information using the mSupply web server, this is the window where you assign a logon name and password to a customer.

Also displayed on this tab is the internet connection speed. It should be noted that this value is derived from your network settings, and may not be edited manually.

Item lists tab



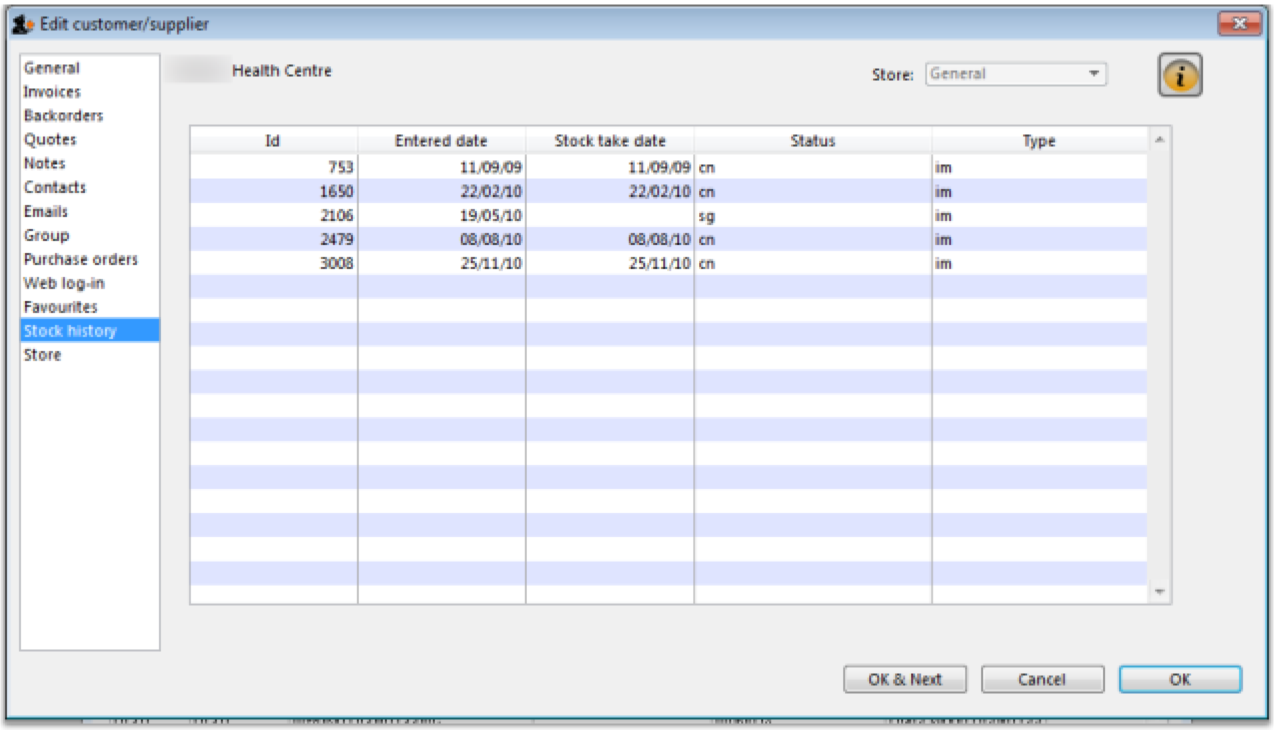
This tab is used to assign Item master lists to customers for use in requisitions created in supplying stores.



For a facility or customer, you can set the master list to function as any of:

- In imprest form for use in the Imprest method
- The basis for requisitions (any type: Request, Customer Stock history or Response requisition.
- Ordering list for web, for online web orders that the facility or customer may want to place.
- Price list: Causes prices configured on this list set the price for items sold to this customer - refer to the Price per unit field in Adding items to a master list.

Stock history tab

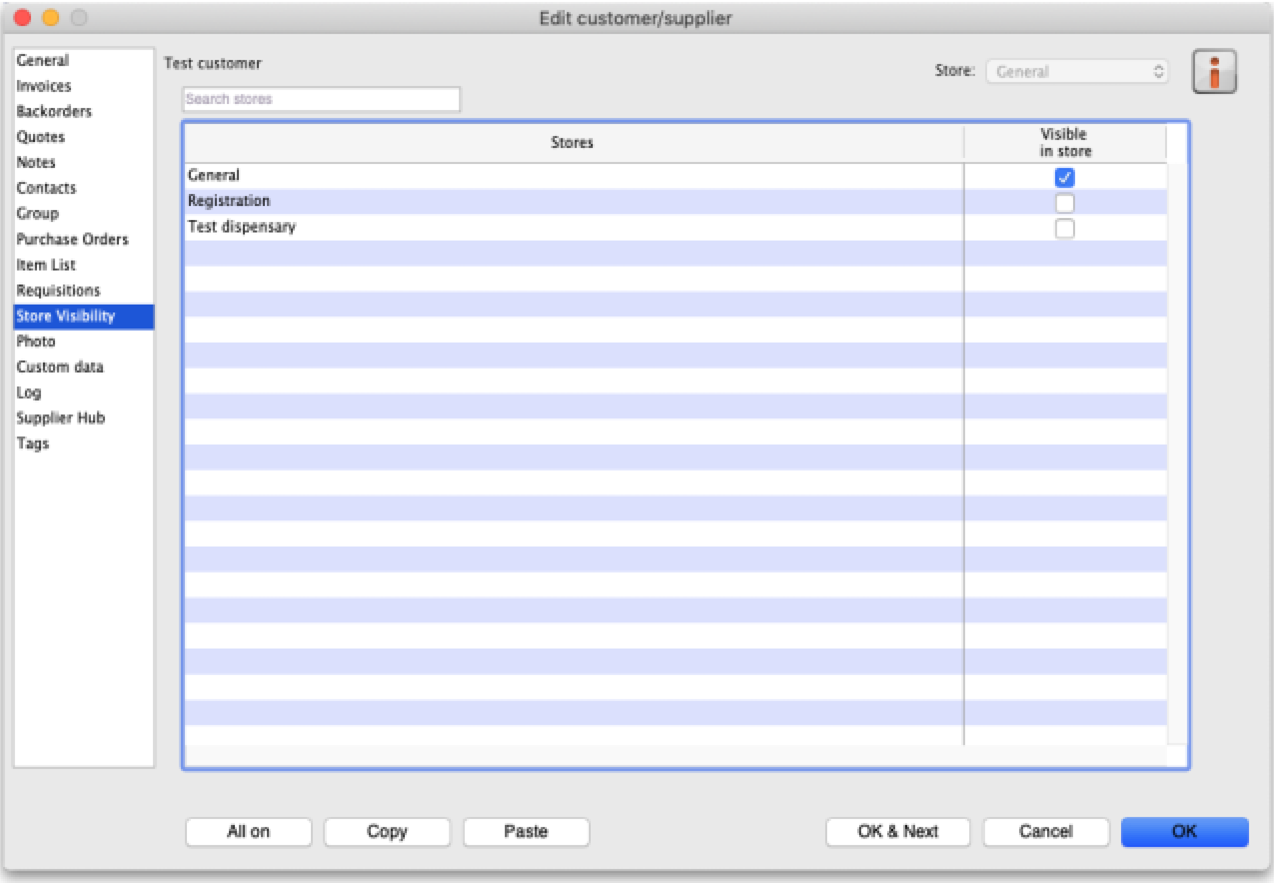


A list of stock histories, showing dates of both the stock take and the date of entry into the computer, the ID reference, the status and the type, is displayed.

Store Visibility tab

Updated version 4.12

The tab shows which stores the customer/supplier is visible in. Only when the visibility checkbox is checked will the customer/supplier be visible to ‘this’ store, which is needed if the store will receive and/or issue goods from ‘this’ store.



There can be a huge number of stores in this list. If you want to find a particular store or group of stores you can type in the *Search stores* field just above the list. This will restrict the list to only stores with a name that contains what you have typed.

- **All on button**: When clicked, this will check all the checkboxes in the *Visible in store* column and the button label will change to *All off*. Clicking it then will uncheck all the checkboxes.
- **Copy button**: Will copy the current state of the *Visible in store* checkboxes.
- **Paste button**: Will make the current state of all the *Visible in store* checkboxes the same as it was when the **Copy** button was clicked.

- You can only edit the visibility of any name in another store if you have permission to login to the store *and* to edit name visibility in that store:
    - if you're just editing visibility in a single store, then an error dialog will popup and the state of its *Visible in store* checkbox will revert to its previous value.
    - **however**, when using the bulk **All on**, **Copy** and **Paste** buttons to update visibility in multiple stores, there is no error dialog and only the stores that you have permission for will be affected.
- If you edit the visibility of store name A in store B, then the visibility of store name B in store A will be updated to match i.e. inter-store visibility is always symmetrical.
- If you are using a syncing system, and editing visibility

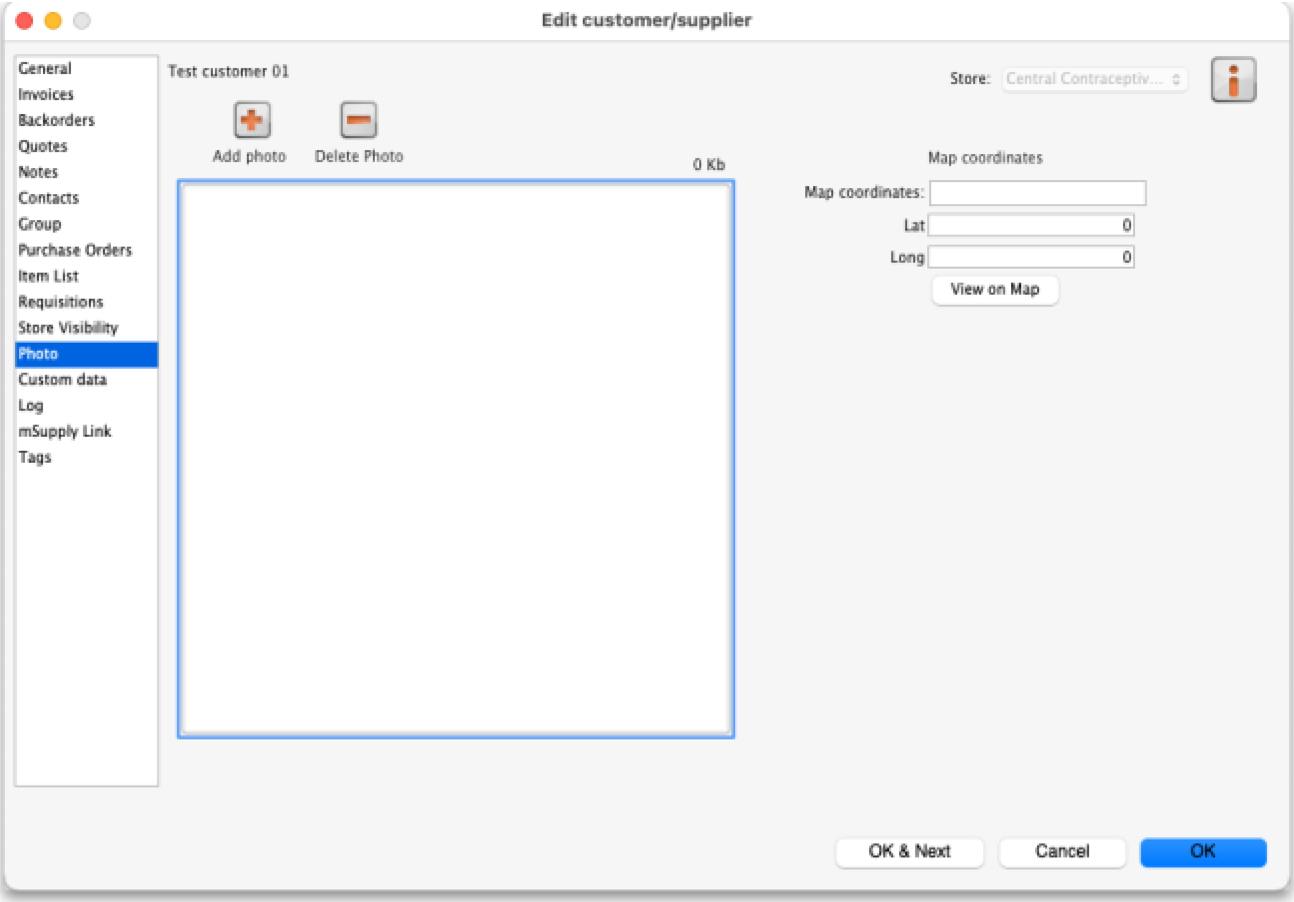
for a store name, that can affect the sync settings for the store on other sites i.e. if you make it invisible to all stores which are **Active** on a site, then the sync status will become **None** on that site; and if you make it visible to at least one store which is **Active** on a site, then the sync status will become **Transfer** on that site - see Store sync-with options.
- In a syncing system, facility names (customers, suppliers, etc.) can only be created and edited on the primary server. Patients can be created in any dispensary, including on a sync site. After that, their visibility is controlled on the central server (after they sync there) in the same way as other names, so everything on this tab (including the **All on**, **Copy** and **Paste** buttons) will be read only on a sync satellite.

When a customer / supplier is created, it will only be made visible in:

- its home store (the store that you are logged into when the name is created; see Home store for details), and
- any other stores *if* their store preference **Names created in other stores not visible in this store** is switched OFF (there's an equivalent store preference for patients, which can be switched OFF to make new patients visible in other dispensary stores) - see Store preferences for more details.

Photo tab

On this tab you can assign a photo of the customer or supplier and set their world map coordinates. Both of these can be used in reports.



Adding or deleting a Photo

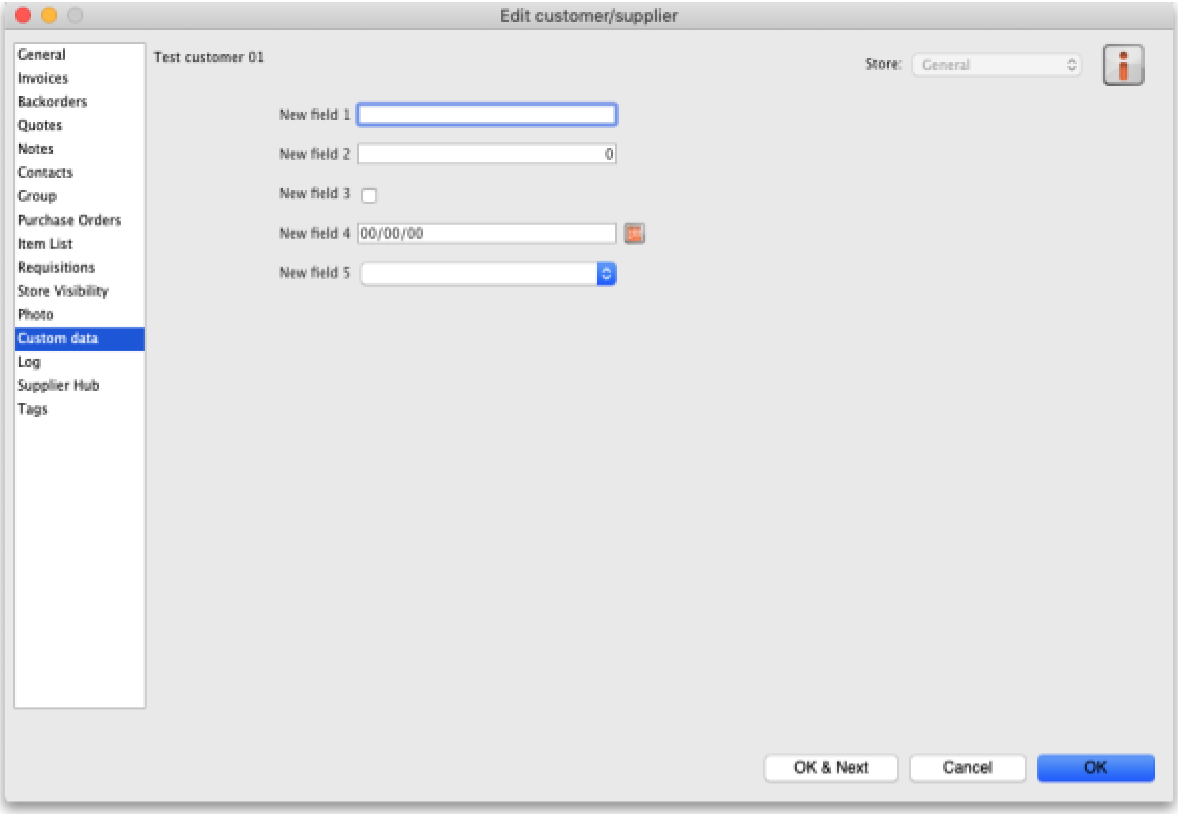
To add a photo, either copy the contents of a file to the clipboard and paste them into the image area or click on the **Add photo** button and select the picture file (png, jpg, bmp or gif files supported).

To delete a photo either click on it in the image area and press the delete key on your keyboard or click on the **Delete photo** button.

Map coordinates

- You can use Google Maps to find the latitude and longitude coordinates of a customer. The format of the numbers copied from Google maps is “latitude, longitude”.
- Copy these numbers into the **Map coordinates** field and press the *Tab* key on the keyboard. mSupply will copy the Latitude and Longitude numbers to their appropriate **Lat** and **Long** fields below.
- You can also enter the numbers manually into the **Lat** and **Long** fields shown in the screenshot.
- You can then view the customer's location by clicking the **View on Map** button.

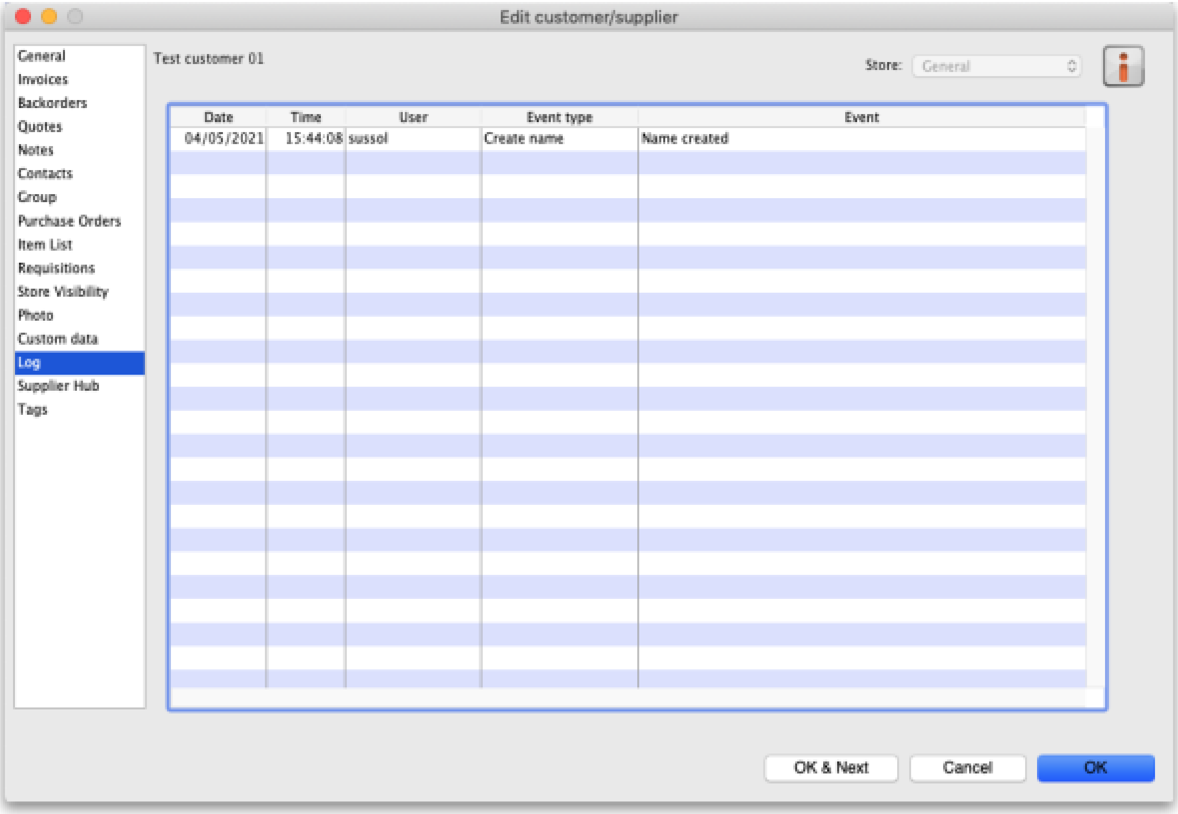
Custom data tab



This tab shows all the custom fields that have been set up in the preferences. See the 16.11. Custom fields page for details.

You can edit or enter values in the fields as required. When you click on the **OK** or **OK & Next** buttons the values will be saved.

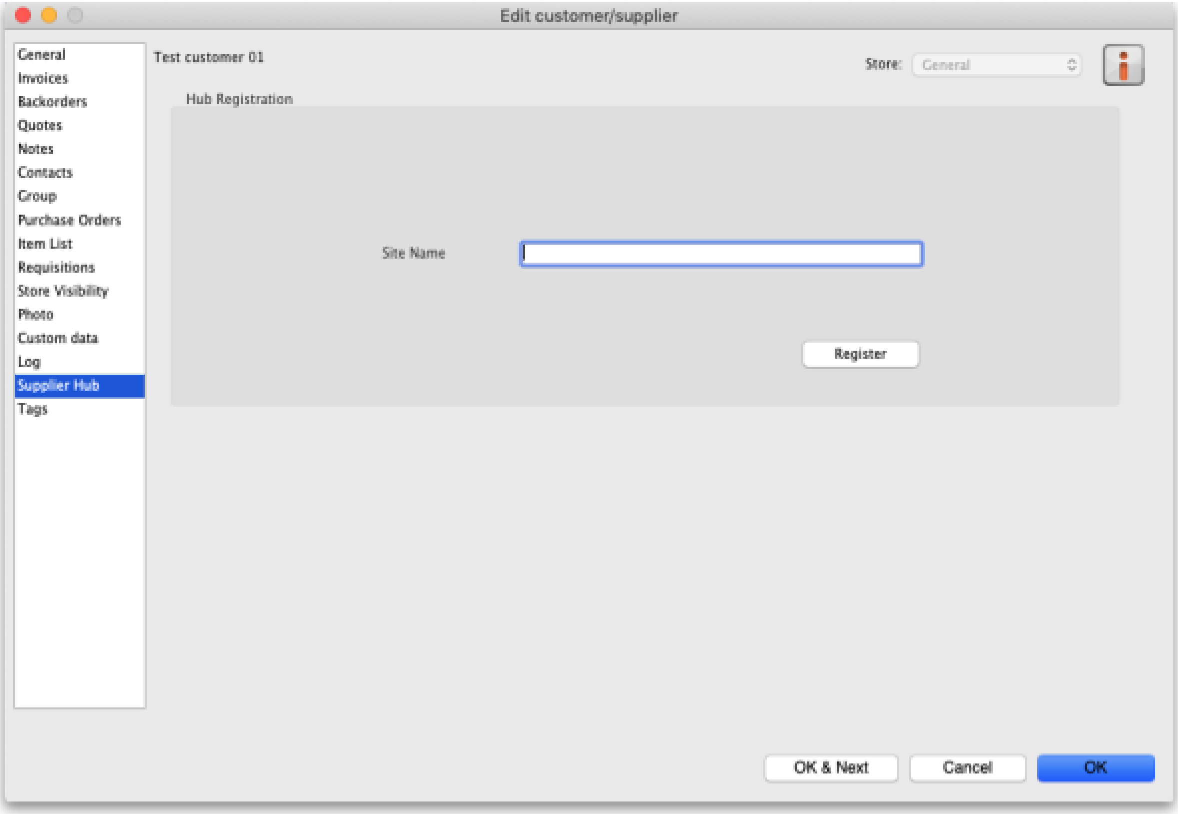
Log tab



This tab shows a list of all the log entries that belong to this name. These entries will also appear with all the other logs for other events throughout mSupply in the log. See the 25.19. The system log page for details.

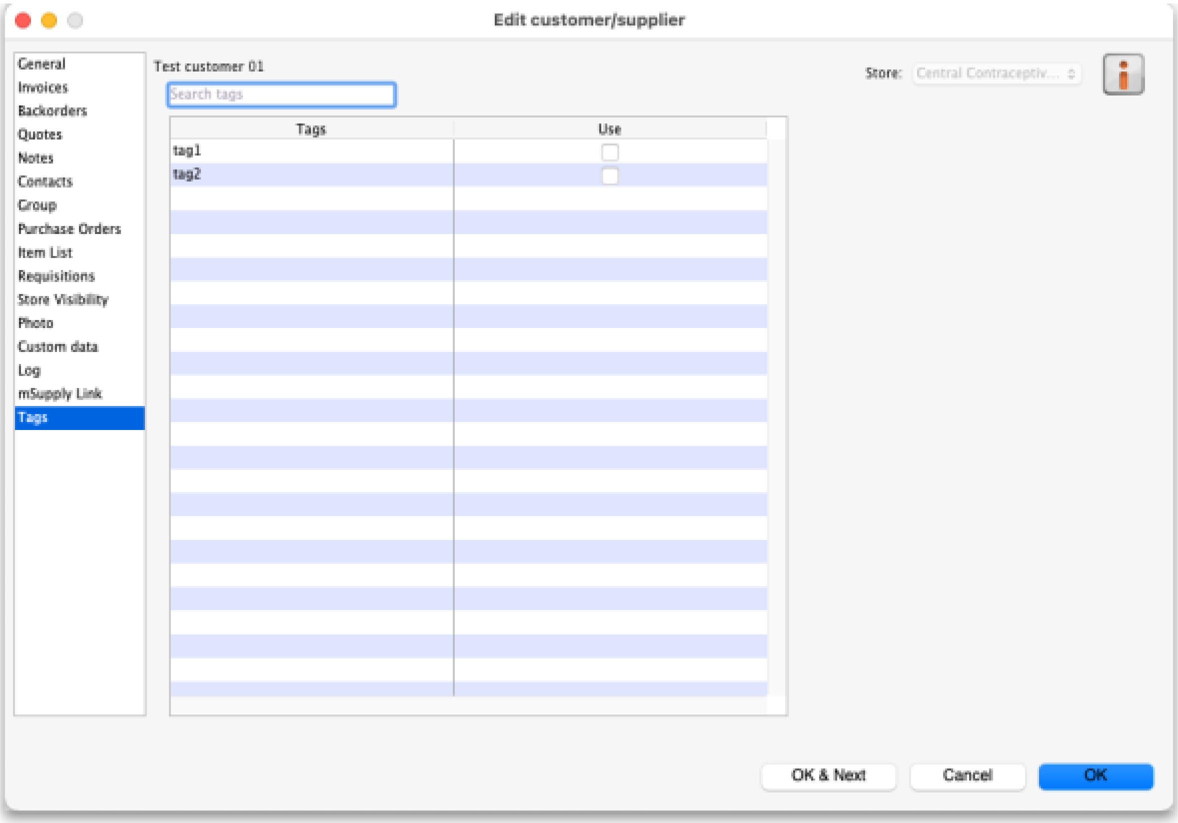
If you want to see more details about one of the logs, double-click on it in the list and a detail window, populated with the log's details, will open.

Supplier hub tab



This tab allows you to register suppliers in the mSupply supplier hub. Enter the site name you wish to register the supplier with in the **Site name** field and click on the **Register** button.

Tags tab



This tab allows you to assign any name tags that you have setup to this name. The table shows a list of all the name tags currently setup in your system. To assign one to this name, simply check the corresponding checkbox in the *Use* column.

If the list of tags is long, you can type something in the **Search tags** field to make the list display tags which contain what you typed only.

Please note: if you assign a tag to a name that is also a store, the tag will be copied to that store's store tags. See the 25.08. Virtual stores page for details on store tags.

See the 5.05. Name tags page for details on how to create and edit name tags.

Import new name codes

If you need to change the name codes for a selection of names, it is a technically challenging process that is easy to get wrong if done manually, especially if you intend to re-use existing codes (not recommended!). Custom code has been developed to do this in bulk. Please contact Sustainable Solutions on support@msupply.foundation to discuss this. Include a link to this heading Code to update Name codes 🙂.

The relevant details are:

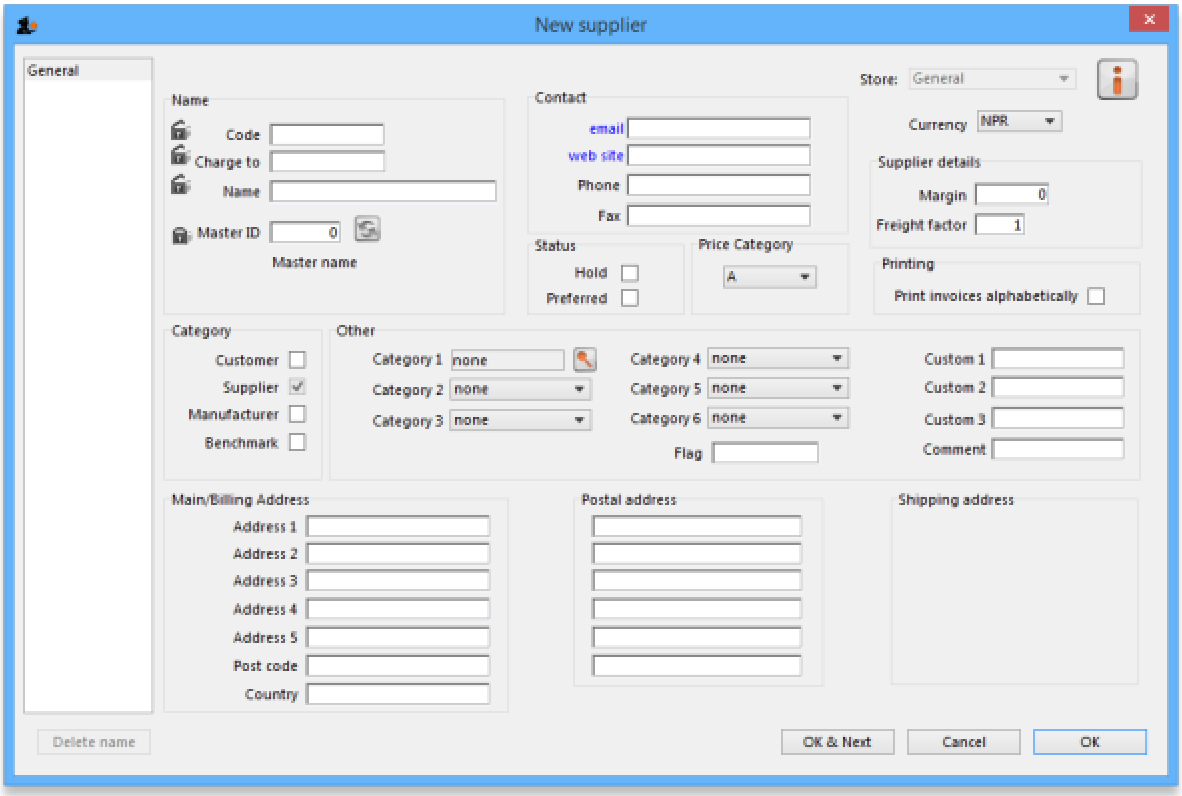
- Method: `z_importExcelToUpdateNameCode`
- mSupply Github issue 13670

Previous: ***5. Customers and Suppliers*** | | *Next:* ***5.02. Contacts***

5.06. Suppliers: adding and viewing

New supplier

To add a supplier, choose this item.



Note- if this supplier will have invoices entered against it and you are exporting invoice data to an accounting program, a new "creditor" must be made in your accounting software with the same code, or you will get an error when you import! (You can usually make the code when you get the error in your accounting software when you try to import!)

The window for viewing/editing a supplier contains basic information. Fields that especially relate to suppliers include:

Currency: If you are using currencies, enter the currency used by this supplier. This value will be filled in with the value set in the "default currency" option of the Preferences.

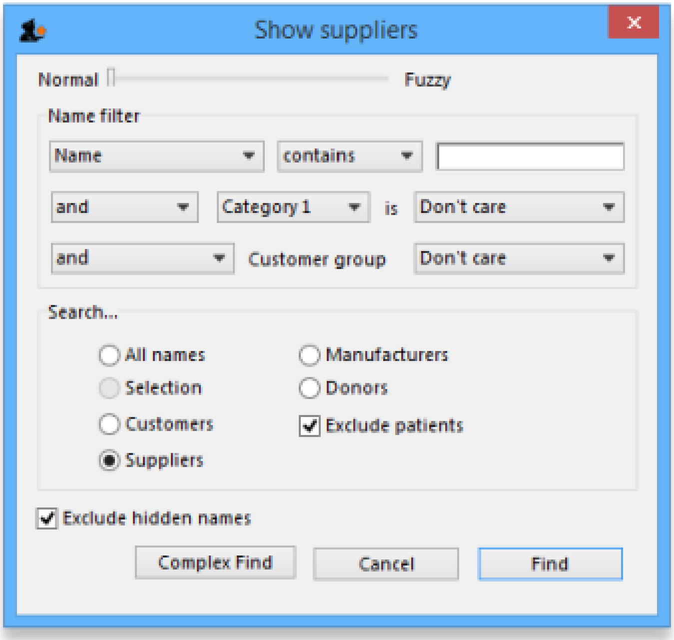
Margin: The amount (as a percentage) that will be added to the cost price to calculate the sell price when you enter an invoice. For example, if you enter "10", items from this supplier that are bought for 30 dollars will have their value increased by 10% (i.e. 3 dollars) and will be sold for 33 dollars.

Category: You will note that the Supplier box is already checked. The special Benchmark category is discussed fully in the section on Tender management, which you can access here.

Freight factor: The amount to multiply supplier quotations by to account for freight charges. (If their quotations are "CIF" you should set this to zero).

Show suppliers

This item allows… you guessed it - you to view suppliers. This window is displayed.



In the field, type as much of the supplier name or code as you want to. If there is only one matching item, the details will be displayed, otherwise a list will be displayed from which you can choose the name you want by doubling clicking it.

*Previous: **5.04. Name categories** | | Next: **6. Purchasing***

5.02. Contacts

This command from the *Special* menu displays a window where you can edit contacts.

Contacts are usually associated with a name (a customer or supplier), and it is easier to edit such contacts using the “show suppliers…” or “show customers…” command.

If a contact is not associated with a name, you can edit details for that contact using this command.

Buttons in the contact list window

New: Use to add a new contact.

Report: Presents the Quick report editor window. See Using the Query Search editor

Find: Use to find an individual contact

Order by: sort the contacts

Print: *clicking this button will present you with a dialog with two choices:*

- If you click *list* a list will be printed of the records in the window.

- If you choose *labels,* you will be shown the label editor, allowing you to print a set of address labels for the current list of contacts. Note that you can save a particular label layout and then use the *load* command in the label editor to restore your layout.

New: To edit a contact, double-click on the line you want to edit. You will be shown the contact details:

Previous: ***5.01. Names: using, adding and editing*** | | *Next:* ***5.03. Merging two names***

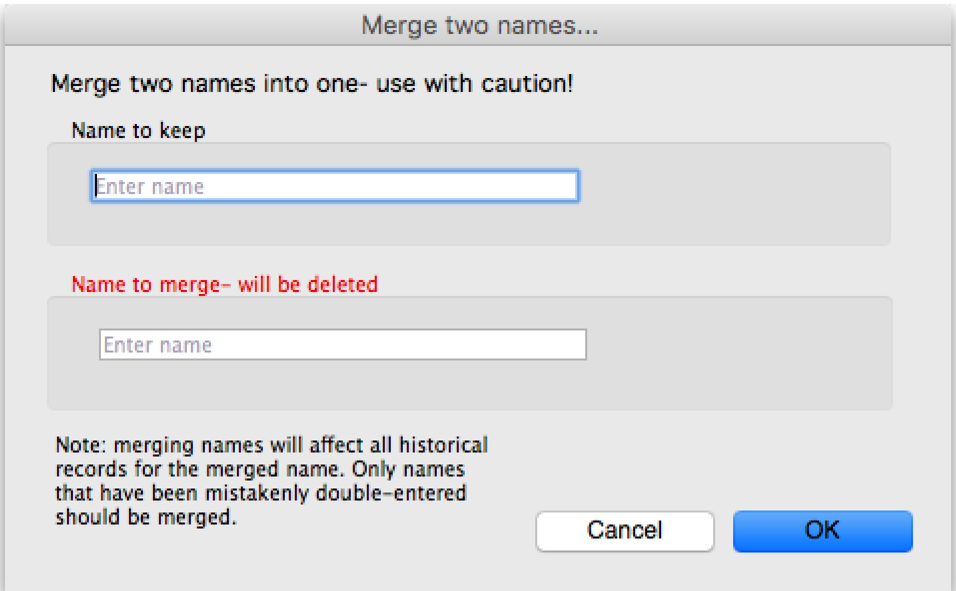
5.03. Merging two names

If you accidentally enter two names into *mSupply* that identify the same organisation, you can use this command to combine them.

Use extreme caution: This operation will move all historical records from the name you delete to the name you are keeping. The operation can only be undone by reverting to a backup copy of your data file (so it is a very good idea to take a backup just before you begin any merging).

Access the function by selecting *Customer > Merge two names...* or *Supplier > Merge two names...* from the menus.

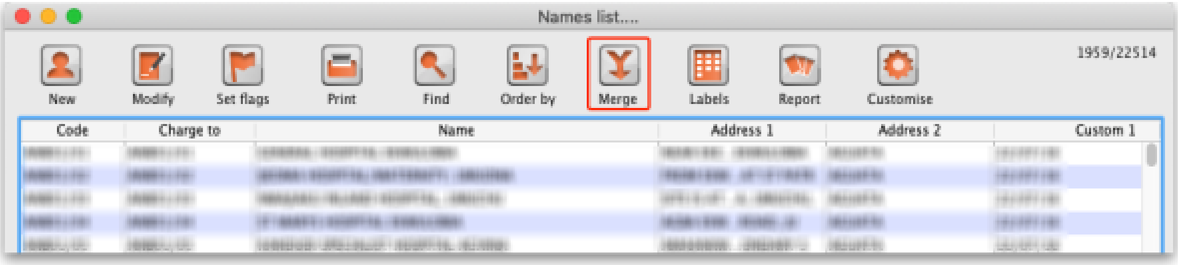
After selecting one of the options, the following window is displayed:



Enter the name to keep (type the first few characters of the name and press the Tab key to select it from a list of names that begin with what you typed), and then the name to merge (same way). When you have checked then checked again that the information is correct, click the *OK* button. You will be given one last chance to confirm and then the merge is carried out.

The merge takes all instances of the name to merge in the mSupply datafile, wherever it may appear, and replaces it with the name to keep and then deletes the name to merge.

You can also access this functionality by selecting two names from a list of customers or suppliers and clicking on the *Merge* button at the top:



If you do this you are presented with a different window, where you select which of the two names is the one to keep (in green) and which is the one to merge (in red):

Use the pairs of *Keep* and *Merge* radio buttons to select which name is to be kept and which one is to be merged. Make sure you select the right way round then click on the *OK* button and, after a final confirmaiton from you, the merge will be carried out.

You can also merge a name into a virtual store (the store must be the name to keep). This is particularly useful if, for example, you have a customer which you now want to turn into a store to manage their stock more fully. This has the benefit of moving all the transactions connected with the customer into the store so that you don't lose any historical transaction information.

When you merge a (customer) name with a virtual store you must finalise all transactions belonging to the customer first (mSupply will tell you to do this if you have not already).

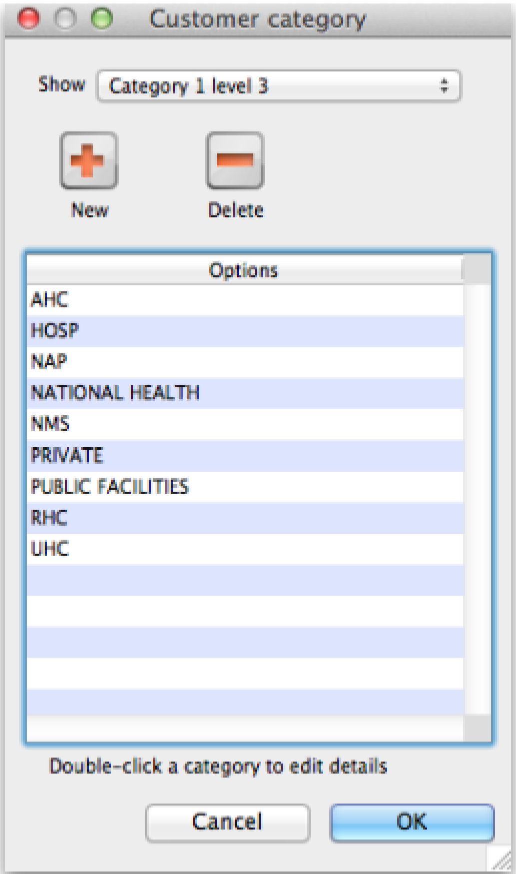
In a synchronising system, The merging needs to take place on the primary server, even if the virtual store is 'Active' on a satellite server (see Remote Synchronisation)

*Previous: **5.02. Contacts** | | Next: **5.04. Name categories***

5.04. Name categories

You can categorise names in mSupply with 6 different categories. This is very helpful for producing detailed reports. You can apply one or all or some of these categories to a name. Categories 2-6 are standard categories but category 1 is special - it's hierarchical and has 3 levels, level 1 is the top and level 3 is the bottom (similar to item categories).

Suppliers and customers have their own sets of categories. To view and edit them you choose *Show categories* from the *Customer* or *Supplier* menu and that brings up this window:

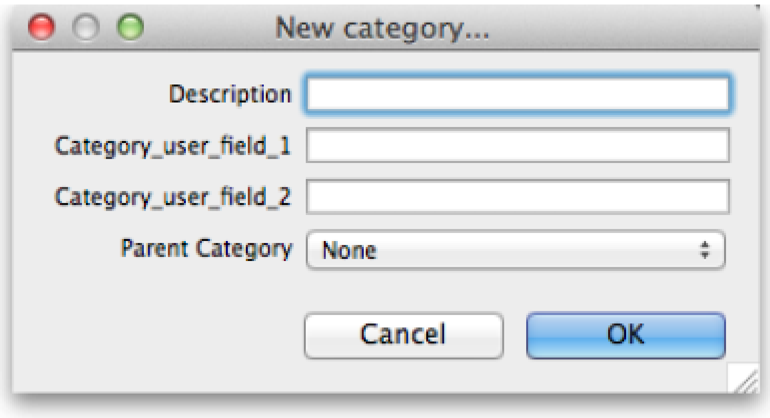


Here you can add and edit categories for your suppliers or, in this case, your customers.

Show drop down list: This determines which category type is shown in the list and which type of category will be created if you click on the *New* button. Note that the Category 1-6 labels in the drop down list will be replaced with any custom labels you have defined in the category label preferences in the General preferences, Names tab.

Delete button: Deletes the category you have selected in the list. You'll be asked to confirm the deletion first of course!

New button: Opens up the new category window which looks like this (Note that double clicking on a category in the list opens up this window too but it will be populated with the current settings for the category you double clicked so that you can edit them all):



Description: This is the category name and will be seen everywhere when assigning names to categories or filtering on name categories in reports.

Category_user_field_1: This is a user-defined field. If a label has not been entered in the preferences then the default *Category_user_field_1* shown here is used. The information you enter here is used in some reports.

Category_user_field_2: A second user-defined field, same rules as for *Category_user_field_1* apply.

Parent category drop down list: This only appears if you're editing a category 1 level 2 or 3 category because they are the only ones that can have parent categories. A parent category is the category to which this category belongs. If the category you are creating or editing is level 3 then you will be able to choose one of the level 2 categories as a parent. If you are editing a level 2 category then you'll be able to select one of the level 1 categories.

Previous: ***5.03. Merging two names*** | | *Next:* ***5.05. Name tags***

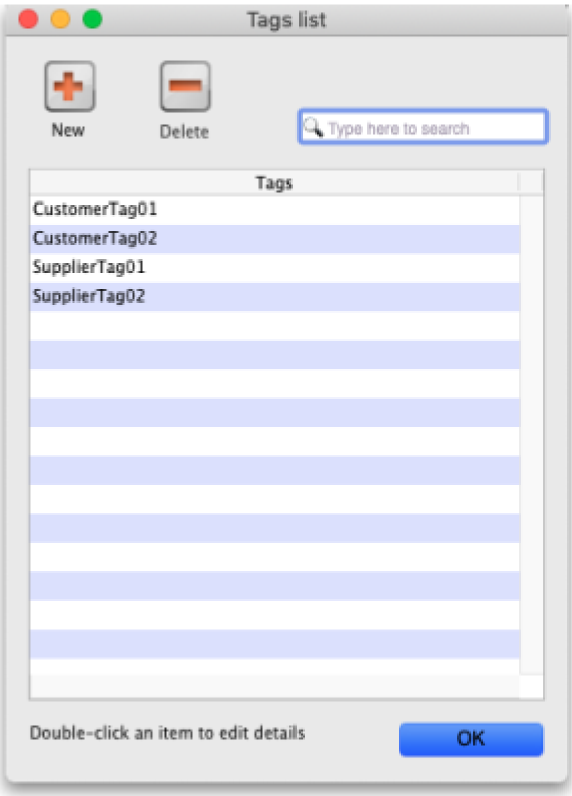
5.05. Name tags

Name tags are tags that can be attached to customers, suppliers and other names to identify them in a flexible way. They can be used in a number of ways including:

- With programs to identify which customers can use which programs.
- To control which facilities are included or excluded in reports.
- To control some aspects of customisations.

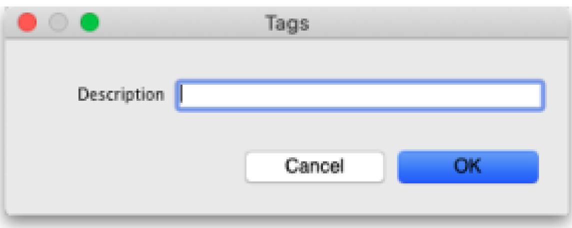
View name tags

To see a list of all the name tags currently set up choose *Customer > Show tags...* or *Supplier > Show tags...* from the menus. This window will open:



Add a new tag

To add a new tag, click on the **New** button and enter the tag's name in the **Description** field in the window that opens:



Click on the **OK** button to save it.

Delete a tag

To delete a tag, click on it in the list to select it then click on the **Delete** button. You will be asked to confirm the deletion.

You can only delete name tags that have just been created. After they have been saved by clicking on the **OK** button of the name tag list window then they can no longer be deleted.

Please note: You cannot edit a name tag so type the descriptions carefully! You can delete a newly created name tag, so if you spot a typing mistake before clicking on the **OK** button of the name tag list window, simply delete the tag and add another with the correct description.

Assigning tags to names

See the 5.01. Names: using, adding and editing page for details on how to assign tags to names.

*Previous: **5.04. Name categories** | | Next: **5.06. Suppliers: adding and viewing***

[1], [3]
Remote support - almost 24/7. We aim to provide a first response within 2 hrs

[2], [4]
Gives you access to the latest software updates, including assistance with upgrading if needed.

[5]
only applicable for mSupply products that have a license fee

[6]
Essential Drug List

[7]
First Expiry, First Out

[8]
Vaccine vial monitor

[9]
International Classification of Diseases