sales manager 5.1

Guidebook

For Android™
mobile technology
platform

Edition 5.1

The content of this guidebook may differ in some details from the software. For best results, make sure you're running the latest version of the app. To check, go to the About page.

This guidebook refers only to the Android app. The iOS app has many similar features, but it is not dealt with here.

All information in this guidebook is subject to change without notice.

For help and support, visit **www.vanware.co.uk**.
For the latest news, follow **@VangSoft** on Twitter.

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Part One

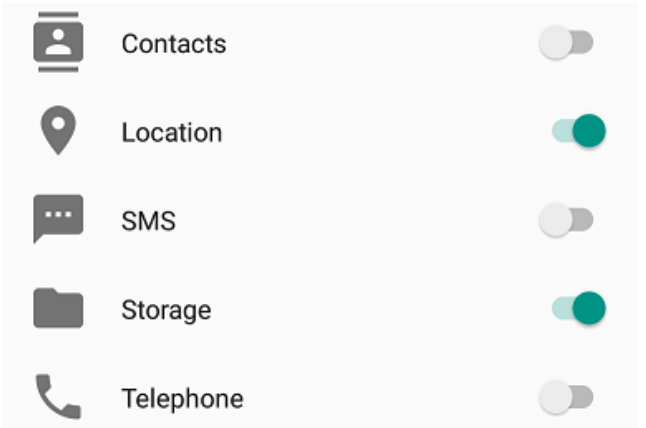
Getting started

Getting Started

Privileges

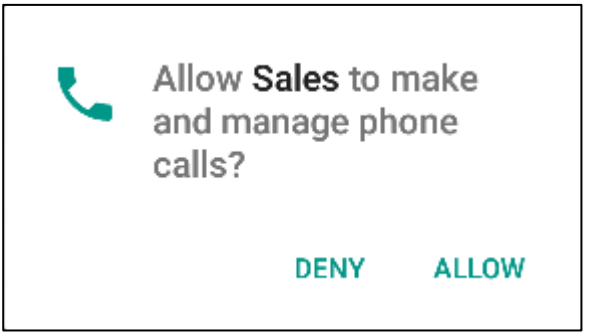
This section describes the privilege scheme introduced in Android 6.0. Users running earlier versions of Android can skip this section.

The Sales app uses five privileges that the scheme regards as dangerous, as shown below:



- The Storage privilege is used to store product images.
- The Storage and Location privileges are both requested when the app is launched, and it will not run without them.
- The other privileges are requested when required, and can be denied.

A typical privilege request is shown below:



Installing the app

The app can be installed directly from Google Play. Users who do not have access to Google Play can download the apk file from Vanguard Software.

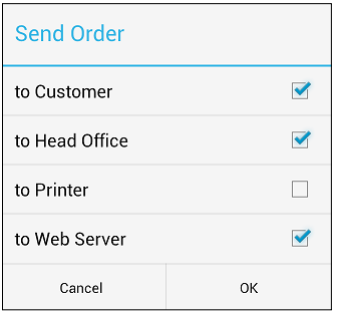
The first time that the app is launched, it asks you whether you wants to install some sample data. If you are trying out the app for the first time, you should do so, as this will give you a much better impression of what the app will look like when it is being used for real. Trying to use it with no data at all is tedious and confusing.

After the sample data has been installed, the app displays the Orders screen. This is the home screen for the app, and it displays a list all the orders stored on the mobile device.

Orders screen

The Orders screen lists all the orders in the database. The icons on the left indicate the type of transaction: C for a credit note, I for an invoice and Q for a quote.

Once an order has been sent to any destination (the customer, head office, a printer or the web server), it can no longer be changed in any way. Such orders are shown in a lighter font on the Orders screen.



The tabs at the top of the screen allow the user to list all the orders, only the fresh ones that have not been sent anywhere, or only the ones that have been sent.

The action bar at the top of the Orders screen contains three icons as follows:

1. **Add** allows the user to select a customer, and create a new order for him.
2. **Totals** displays the total sales for various periods. This is a server side query, and only orders that have been sent to the web server are included in the totals.
3. **Remove** removes all the orders that have been sent.

The Orders screen cannot be used to create orders for new customers, or to select an existing customer from a map. If the user wants to do this, he should go to the Customers screen instead.

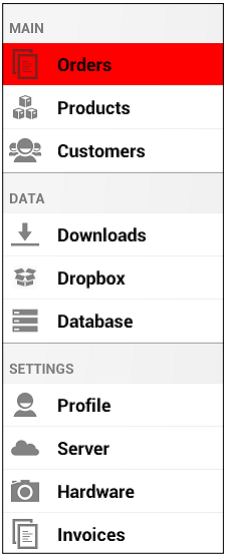
Navigation drawer

A navigation drawer is a drop down menu, which is displayed by tapping the home icon in the action bar.

The horizontal bars to the left of the home icon indicate that a navigation drawer is present.

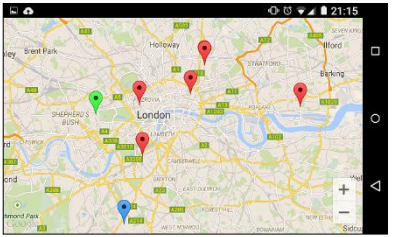
Navigation drawers make it much easier to get from one screen to another, and is a radical improvement on a traditional hierarchical menu.

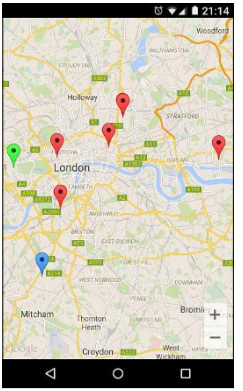
Navigation drawers scroll vertically. The one in the Sales app is longer than the screen on a Nexus 4, and only the top part is shown on the right.



Users of the Sales app should familiarise themselves with the options on the navigation drawer.

Orientation





Every screen in the Sales app can be viewed in either landscape or portrait orientation.

Some screens operate in split screen mode on a tablet landscape mode.

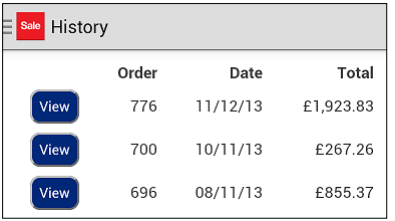
Swiping

Some screens that display individual records can be swiped right to left, to move to the next or previous

record in a sequence.

Because of this, swiping left to right does not open the navigation drawer, as it does on other systems.

Web Views



Some of the screens that you see in the Sales app are not generated by Android at all, but are actually the output of queries run on the web server. A typical example is the History screen for customers, shown above.

This screen does not look like an Android screen, because it is not. It is actually an HTML document, which has been created on the server, downloaded to the Android device and rendered in a web view.

Note that the dialog also takes place on the server. In the above example, if you click on one of the View buttons, the server will respond by displaying the invoice. All that the app does is to show the output.

Printing

It would be nice to be able to print out an invoice on site, and present it to the user. But in practice, printing from an Android device to a local printer presents considerable technical difficulties.

The Android Bluetooth stack is primitive, and does not support the BPP protocol for printers. Peer to peer Wi-Fi connections are not well supported, and infra-red is not supported at all.

Printing is really only feasible on scenarios such as showrooms and trade shows, where there is a Wi-Fi router connected to the internet. A truly portable solution is not available.

The Sales app only supports printing using HP ePrinting and Google Cloud Printing. In both cases an HTML document is sent to a remote server, where it is rendered and sent back as a print job.

The Sales app only supports printing on A4 and US Letter sized stationery. Due to the scenarios in which it is likely to be used, there is really no point in supporting other formats.

Barcode scanning

The Sales app can scan barcodes either using an external Bluetooth or USB scanner, or using the built-in camera on a mobile device.

Camera scanning uses the built-in camera on a phone or tablet to scan barcodes. It works surprisingly well on Android devices. For ergonomic reasons, it is probably more suited to phones than to tablets.

If you want to check how camera scanning will work on your particular device, you can download a free app called Barcode Scanner, from Google Play.

This is the app that Sales app actually uses to scan barcodes, and if it is not installed, the Sales app will ask you to do so.

The main problem with camera scanning from a UI design perspective is that it takes over the display, and so interrupts the dialog with the user. This is something that we are still working on.

External scanners have to support the HID protocol. The scanner works like an external keyboard. This can cause problems with the focus, and with Android thinking that it actually is a keyboard.

Getting help

Help is available through several channels:

1. Download the latest version of this manual from our **website**.
2. Visit our **company blog** for news articles and FAQs about the Sales Manager.
3. Tweet us on **@VangSoft**. This is the fastest way to contact us.
4. Email us on **support@vanware.co.uk**. We try to answer all messages within 24 hours.

The last two of these options are available on the navigation drawer.

Part Two

Managing Your data

Managing your data

Tasks involved

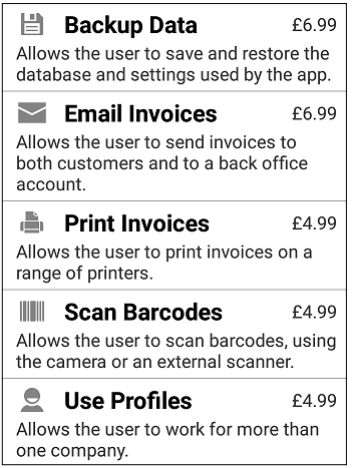
Your first task as a user is to manage your data. This involves:

1. Downloading your data from a web server.
2. Installing your product images.
3. Checking the status of your data.
4. Backing up your database.

Downloading product images, and backing up the database, both require a Dropbox account. Dropbox accounts with a storage limit of 2GB are free, and these are perfectly adequate for use with the Sales app. Backing up the database also requires an in-app purchase.

Store screen

There are five individual options, and you can save money by purchasing a bundle. Prices are displayed in your local currency, based on the prices in GBP shown here.

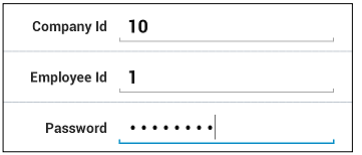


The options only have to be purchased once, and they can be restored onto any Android device using the same Google Play account. This is done by tapping the Restore button in the action bar.

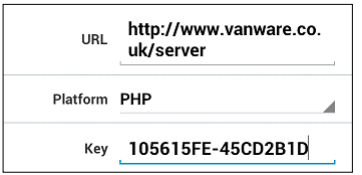
The purchases are managed by Google Play, and payments are made by credit card. Users often find that their cards are declined for no apparent reason, but that is something over which we have no control.

Server settings

The server settings allow the app to identify the web server being used. This will either be a virtual server on our hosting service, or a real server hosted by your organisation. If you are running the app without a web server should set the type to None. Setting it to Demo Company will allow you to download the sample data, but little else.



The login details are used to identify you to the server, and to identify your company to the hosting service. Self-hosted servers usually ignore the company id.



The last section is for self-hosted servers only. It allows the app to build a precise URL for each transaction. and it also contains the registration key. Each mobile device has a unique key, which must be purchased from Vanguard Software.

Downloads screen

The first set of options downloads data for one of the main tables. Downloading a table will remove any changes that you might have made. The process is extremely fast.

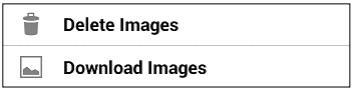
The last two options are slightly different, and are covered in depth below, in the section on system administration.

If you have product images, will find that the thumbnails disappear whenever the products table is downloaded. To restore them, they should go to the Dropbox screen, and run the Create Thumbnails option.

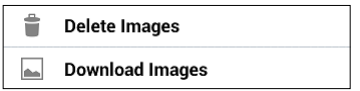
Dropbox screen

The options on the Dropbox screen are divided into four pairs as follows:

1. **Backing up the database**
   These options require an in-app purchase, which is recommended for all users.

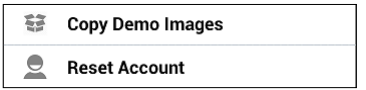


2. **Managing product images**
   Downloading images does not remove the images for products that are no longer being sold.



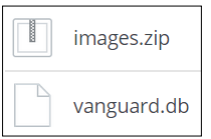
3. **Managing thumbnails**
   Creating thumbnails does not remove the thumbnails for products that no longer have images.

4. **Additional options**
   Copy Demo Images copies the images for the demo data. Reset Account allows you to use a different Dropbox account.



The first time that this screen is loaded, the app has to obtain permission from Dropbox to use an account, and to use an app folder. This process sometimes takes more than one attempt to complete successfully.

All the Dropbox files that the Sales app uses are contained in a folder called Sales Manager, in the Apps directory. Usually it will contain be just two files:



1. A backup copy of the database, called vanguard.db.
2. A file containing all the product images, called images.zip.

On the Android device, the product images are contained in a dedicated folder in the file storage area, and the thumbnails are stored in the products table.

Installing the product images

Product images are pictures of your products, in JPEG format. They should not be too large - around 50KB is ideal. Camera shots are far too large.

Each product image has a file name which is the same as the id of the corresponding product, and an extension of ".jpg". For instance, the image for product 004 would be 004.jpg.

The product images should be stored in a zip file called images.zip, and placed in the Sales Manager application folder in the Dropbox account.

The Dropbox screen has a shortcut for getting hold of the images for the sample data, which copies the file from one of our own Dropbox accounts.

Alternatively, you can:

1. Download the images from our web site.
2. Create your own images.zip file.
3. Upload the file to the Sales Manager folder in your Dropbox account.

That takes longer, but it gives you a better idea of how to create your own product images.

Once you have the images.zip file in the Sales Manager folder of your Dropbox account, you are

ready to install them on your mobile device.

Go to the Dropbox screen, and:

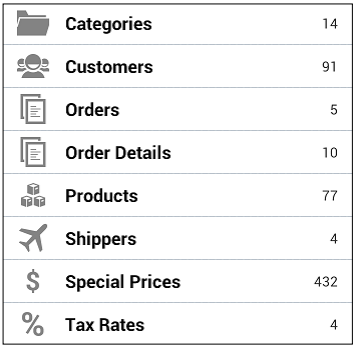
1. Tap on Delete Images (optional).
2. Tap on Download Images.
3. Tap on Delete Images (optional).
4. Tap on Create Thumbnails.

To make the process easier, these options are arranges sequentially on the Dropbox screen.

Database screen

The Database screen displays four blocks of information to help the user manage his data:

1. **Rows in Tables**
   This gives the number of rows in each of the main tables in the database. Except for the customers table, these should match the counts on the web server (some customer records are only downloaded by one user).



2. **Bytes of Data**
   This gives the amount of storage used by the SQLite database, and by the product images.

3. **Customer Locations**
   This shows how many customer records have values for latitude and longitude. This may be of concern if you sometimes use the customer map to locate customers.

4. **Images and Thumbnails**
   This information tells you whether your product images and thumbnails are up to date.

Part Three

Taking an Order

Taking an Order

Introduction

This chapter will take the form of a walkthrough. Using the sample data that we have just installed, we will create a new order for an existing customer, and add a few products. Then we will send the order, to complete the process.

The customer that we will visit is called B's Beverages, and she will order some items from the Beverages category. Since the fictitious address of this customer happens to be near to where we live, we will be able to demonstrate the use of maps to locate a customer.

Customer map

We will start by displaying the customer map:

1. Tap the home icon.
2. In the navigation drawer, select the Customers option.
3. In the action bar, tap the overflow indicator.
4. From the drop down menu, choose Map.

This will display a map of all customers within a range of 20km or so, as shown on the following page. The

current location of the user is shown with a blue pin. The other pins are for customers, and can be green, red or purple.

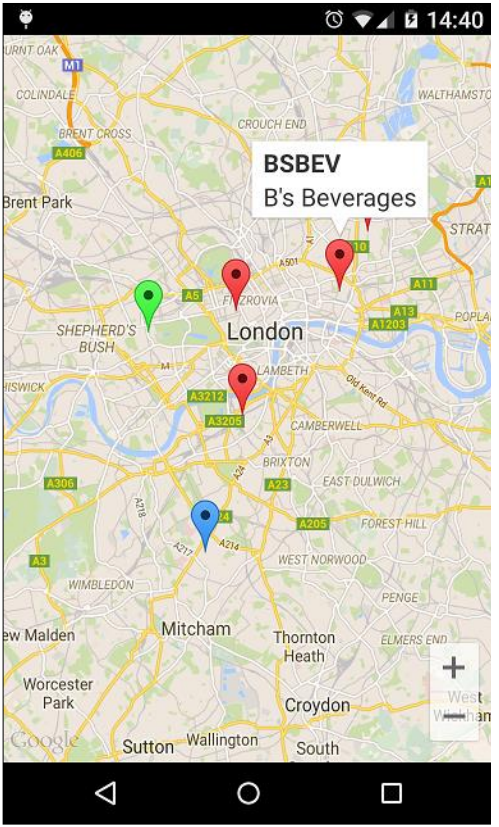
The overflow indicator is the icon consisting of three vertical dots, on the right hand side of the action bar. When tapped, it displays a menu of actions whose icons would not fit on the action bar.

If you are using a tablet, or you are holding your phone in landscape mode, the map icon will probably appear on the action bar anyway.

By default, the app uses GPS as the location provider. This is slow, but accurate. The other location provider that Android uses is network location, which is faster but less accurate. Location providers are discussed in a later chapter.

Having got our customer map, we can now tap on the pins until we find the customer we are looking for. The map should now look like the screenshot on the next page.

Unless you are in London yourself, you will not actually find B's Beverages, and you will have to choose some other customer instead.


14:40
BSBEV
B's Beverages
Brent Park
BRENT CROSS
CROUCH END
A406
M1
COLINDALE
SHEPHERD'S BUSH
London
LAMBETH
A3212
A3205
CAMBERWELL
BRIXTON
EAST DULWICH
A23
A205
FOREST HILL
WEST NORWOOD
A214
A217
A306
A3
WIMBLEDON
PENGE
Mitcham
Thornton Heath
ELMERS END
Worcester Park
Croydon
Sutton
Wallington
South
A11
A13
A1203
Old Kent Rd
A5
A501
Google

Now if we tap on the snippet for our selected customer, the app will take us to the detail view for that customer. But let us backtrack, and see how we would locate a customer on the customer list instead.

Searching lists

The customer list shares number of features with other the other main lists in the Sales app. In particular, it uses the same method to search for records.

The first two icons in the action bar are always the same. The first one opens a search bar, and the second one changes the sort order. The list can be sorted and searched either by name or by id.

To demonstrate this, tap on the search icon, and type the letters “be”. The list now only shows the four customers whose names contain our target. Note that

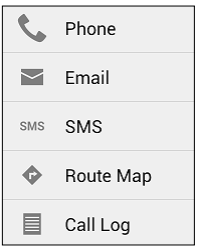
the target can appear anywhere in the list, and the search is not case sensitive.

Select our target customer B's Beverages, and we will look at the Customer Screen.

Customer screen

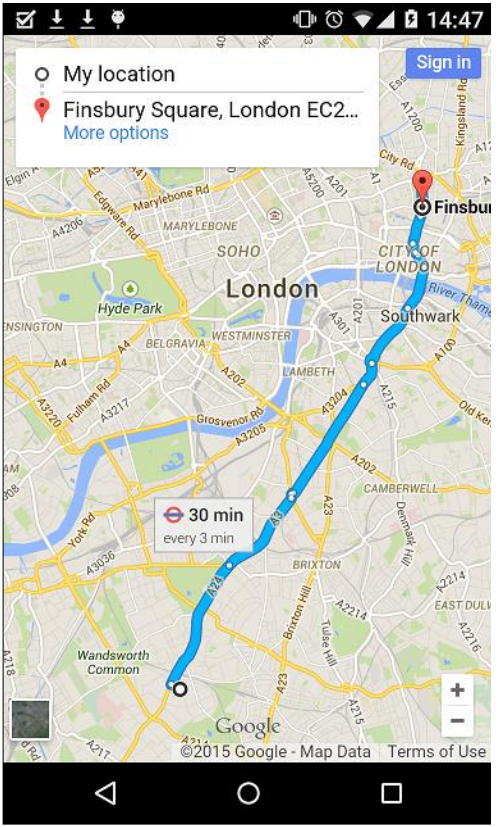
The customer screen displays the details of the customer, and gives the user various ways to communicate with him.

The action bar contains three icons. The first one creates a new order for the customer, and we will be using that shortly. The other two show drop down menus.

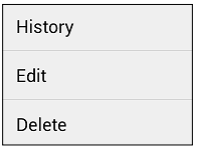


The contact menu gives various ways in which the customer can be contacted. Some of the options may not be available, especially if you are using a tablet instead of a mobile phone.

The route map sends the current location and the customer address to Google Maps, and asks it to show the route.


14:47
My location
Finsbury Square, London EC2...
More options
Sign in
Finsbu
Marylebone Rd
MARYLEBONE
SOHO
CITY OF LONDON
London
Hyde Park
Southwark
River Thame
WESTMINSTER
BELGRAVIA
LAMBETH
Fulham Rd
Grosvenor Rd
CAMBERWELL
BRIXTON
EAST DULV
30 min
every 3 min
York Rd
Wandsworth Common
Google
©2015 Google - Map Data
Terms of Use

The overflow menu contains the options one would expect, to edit or delete the customer record.



The History option displays a list of past orders for the customer, and once again this is a server side query. It only shows orders that have been uploaded to the web server.

The Customer Edit screen is as one would expect, but the action bar contains some interesting icons that are worth discussing:

1. **Locate**
   This uses geocoding rather than GPS. In other words, it sends the customer address to Google Maps, and asks it where that is.

2. **Upload**
   This uploads the customer record to the web server, which adds it to the customer table, or replaces the existing record.

3. **Import**
   This allows the user to import a contact from the Contacts app. Save your prospects as contacts until they are ready to place an order.

You will find a detailed description of all the fields in the customer record in the appendix. Now we are

ready to create our first order, so tap on the Order icon on the Customer screen.

Order screen

The app stores each record as one header record and a number of detail records, one for each line in the order. The order screen displays all the header information, plus some totals for the detail lines. Detailed layouts for both record types can be found in the appendix.

The order is processed to produce an HTML document called an invoice. This can be viewed locally on your mobile device, emailed to people, or sent to a printer. Most printers can handle HTML jobs, and the invoice is specially designed for printing on A4 or US Letter stationery. No other sizes are supported. A sample invoice can be found in the appendix.

The icons in the action bar reflect the structure of the data. The first one is for editing the header data, and the second one is for adding, changing and removing detail lines. If the order has been sent, these icons will both be hidden.

The overflow menu contains more important options:

1. **View**
   Displays the invoice locally in a web browser.
2. **Send**
   Sends the order or invoice to various destinations.
3. **Copy**
   Copies the order.
4. **Delete**
   Deletes the order. Both the header record and the detail records are removed from the device. The web server is not affected.

The first thing that you will want to do when you have created a new invoice is to check the header information, to see whether anything needs changing. So on the order screen, tap the first icon in the action bar. That is the one that one that looks like a pencil.

Header screen

The Header screen contains much of the dame information as you see on the Order screen, except this time you can edit it.

The first information that you will probably want to

change is the delivery details. The Required Date is to satisfy legal requirements in the US. Freight charges are also for US users. In the EU, VAT is charged on shipping costs, so they have to be included as an item in the invoice.

Notes

The notes fields have a number of special properties:

1. They can go over any number of lines. Just tap enter to add a new one.
2. They use a monospace font, so that characters can be lined up in columns.
3. They can contain links. Web pages and email addresses will usually work. Phone numbers might work, and street addresses will probably not.
4. There is a setting to determine whether order notes are printed on invoices, or are private.

Having changed he header information, return to the Orders screen and tap the Lines icon. This is the second icon in the action bar.

Lines screen

Categories

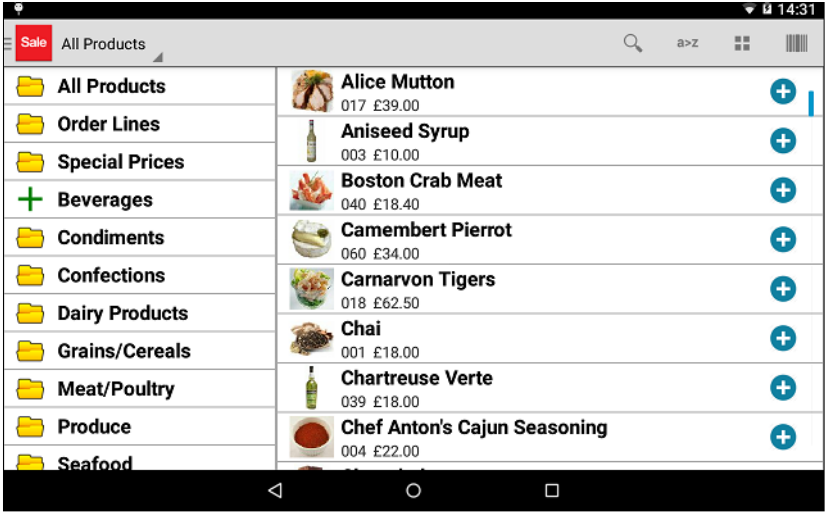
The Lines screen looks spectacular on a tablet in landscape mode, as the screenshot on the next page shows. It operates in split screen mode, with categories on the left and the corresponding products on the right.

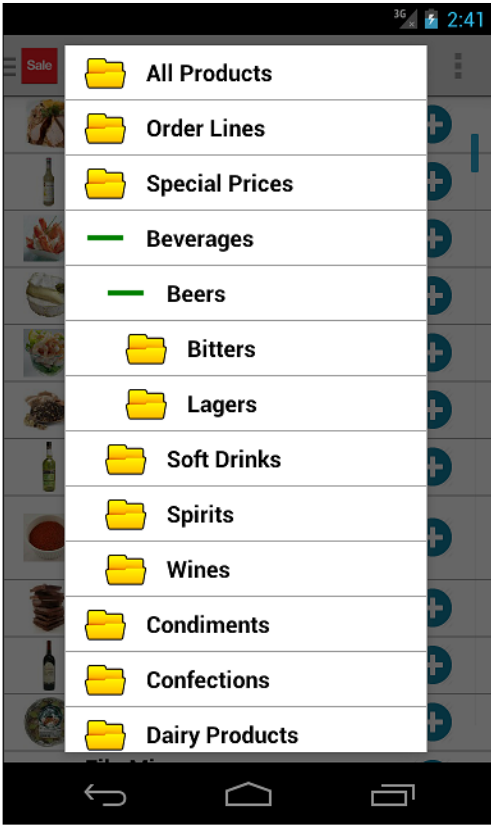
The Lines screen on a phone (or on a tablet in portrait mode) is no slouch either, as the next screenshot shows. This time the category is selected from a list that pops up when the category in the action bar is tapped.

Note that categories can be nested, and this is described in more detail in the section on system administration.

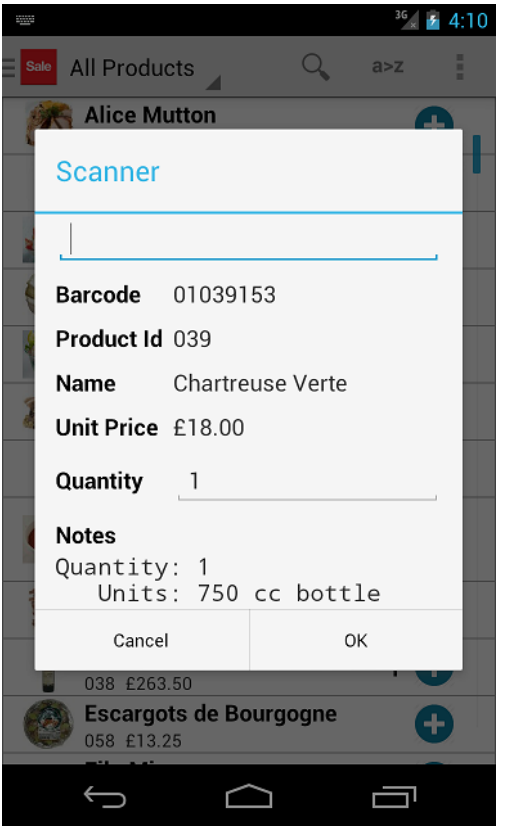
There are also three special categories:

1. **All Products** contains the products in every category, and those in none.
2. **Order Lines** contains the products in the order.
3. **Special Prices** contains the products for this customer has a special price.


14:31
Sale
All Products
a>z
All Products
Order Lines
Special Prices
Beverages
Condiments
Confections
Dairy Products
Grains/Cereals
Meat/Poultry
Produce
Seafood
Alice Mutton
017 £39.00
Aniseed Syrup
003 £10.00
Boston Crab Meat
040 £18.40
Camembert Pierrot
060 £34.00
Carnarvon Tigers
018 £62.50
Chai
001 £18.00
Chartreuse Verte
039 £18.00
Chef Anton's Cajun Seasoning
004 £22.00


2:41
Sale
All Products
Order Lines
Special Prices
Beverages
Beers
Bitters
Lagers
Soft Drinks
Spirits
Wines
Condiments
Confections
Dairy Products


3:33
Sale
Gallery


4:10
Sale
All Products
a>z
Alice Mutton
Scanner
Barcode 01039153
Product Id 039
Name Chartreuse Verte
Unit Price £18.00
Quantity 1
Notes
Quantity: 1
Units: 750 cc bottle
Cancel
OK
038 £263.50
Escargots de Bourgogne
058 £13.25

Gallery

The third screenshot is of the Gallery screen. Here, you can choose products visually. Products that have been added to the order are shown with a red border.

Tapping on the image of a product has the same effect as selecting it on the Lines screen. The category is the one in effect when the Gallery option is selected on the Lines screen.

Barcodes

The fourth screenshot shows the panel used for scanning barcodes. It is activated when the Scan option is selected on the Lines screen.

The screenshot shows the panel just after a product has been scanned. The sample data does not have any barcodes, so we had to cheat and edit our data manually.

The Sales app supports external barcode scanners using the HID protocol. They must be configured with no prefix, and a suffix of either CR (carriage return) or LF (line feed). This is the default for most scanners.

Adding Lines

There are two ways to add products to the order from the Lines screen:

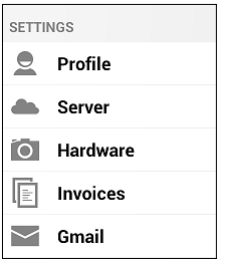
1. Tapping on the + (plus sign) increases the quantity by one.
2. Tapping anywhere else displays a screen which allows the user to change the quantity, price, discount and tax rate, and to view the product notes.

To finish off the walkthrough, add one bottle of Chartreuse Verte and one bottle of Côte de Blaye to the order. Then return to the Order screen and select the View option. The screen should now look like the one in the appendix.

The order is ready to send, except that we have not set up any destinations yet, so that will be one of our tasks in the next chapter. To sum up the order taking process, the next page has a diagram showing the relationships between all the main screens involved.

Settings

The Sales app has five pages of settings:



1. **Profile**
   This allows you to take orders for more than one company, by swapping the databases. Since the settings are also stored in the database, all you have to do is swap them and you are good to go.

2. **Server**
   This is for setting up the web server. It has already been discussed in the chapter on managing your data.

3. **Hardware**
   This is for setting up your printer, barcode scanner and location service. The settings are all straightforward. The one you may want to play around with is the location provider. GPS is slow, and you may want to go with network location even though you have a GPS receiver.

4. **Invoices**
   This contains various options for printing invoices. Again, most of the settings are straightforward. HTML headers and footers are tricky, and you may prefer to stick with plain text.

5. **Gmail**
   For security reasons, you should create a Gmail account specifically for use with this app. The most common mistake that people make is to enter the email address instead of just the name of the account.