SYNC UPLOADER

Manual

Version 4.08

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1. Contents

2. Introduction

Thank you for purchasing the **SYNC Uploader** from redware for transferring data from your accounting database into Microsoft CRM. This is the fourth release of the software and we now support both versions 3.0 and 4.0 of Microsoft CRM.

Note: The evaluation version is fully functional but will only work with accounts beginning with letters in the range A-G.

If you have any questions or problems with the software, please email sync@redware.com for email support. You should be careful and back up your CRM database(s) when you first start using the Uploader and before any large updates.

Our software extracts data from the accounting database and imports into Microsoft CRM as new **customers**, **products**, and **invoices**. The principle behind the synchronisation process is to create a new record if the data has not already been entered into CRM but make minimal changes if the record is already there.

The Uploader considers all customer accounts to be companies and may not be suitable for B2C retail environments although you should contact us if you have this requirement. Please note also that the current version is not fully multi-currency and simply uses the default currency of the user identity to specify the currency for all accounts, products, and invoice items.

The synchronisation process and user interface for SYNC Accounting is straightforward as this is meant to be a synchronisation utility rather than a full bodied application. The installation process is however a little tedious and requires editing of an XML configuration file to set up the parameters for the application.

Synchronisation of data from the accounting system into CRM is fully supported for all versions of **Sage Line 50** and **Intuit QuickBooks**. We also support one-way synchronisation for exporting data from your accounting system into CRM with several versions of Sage including **Sage Instant Accounts**, **Sage MMS 3.5**, and **Sage 200**.

We support **two-way integration** for Sage Line 50 and QuickBooks only. This allows you to use the sales cycle within CRM and have the Uploader automatically create invoices within the accounts system from completed sales orders (or invoices) in CRM.

We also offer a **consultancy service** alongside our software to integrate with any accounting system. This will typically require 5 days of work provided that we can read your accounting database and use a software development kit to get data into the accounting database.

2.1. SYNC Accounting

We have a companion software product called **SYNC Accounting** that provides read-only access to accounting information directly from CRM simply by entering the sales account reference into the **accountnumber** field of CRM.

This approach has little impact on your systems and is not restricted by the database structures of CRM and shows credit notes and information on outstanding invoices and additional accounting information.

The disadvantage with this approach is that data is not available within CRM use in the sales cycle and for reporting purposes. Some of our customers use just the SYNC Accounting product particularly if they are using the accounting package for the sales cycle and others use just the SYNC Uploader or both systems concurrently – one for powering the sales cycle within CRM and the other to provide a proper window on the accounting database.

Please see our website for more information on SYNC Accounting which we bundle together with the SYNC Uploader for many of our customers.

3. Overview

The SYNC Uploader copies new customers, products, and invoices from your accounting system into CRM with minor updates made to data that is already in the CRM database.

The principle behind the synchronisation process is to create a new record if the data has not already been entered into CRM but make minimal changes if the record is already in the database.

This means that account details are created in CRM but the address information is not constantly updated by the synchronisation process. You may want to take steps to make the data read-only in CRM if you are using the accounts package to drive data entry.

3.1. Synchronising Accounting Data with CRM

The SYNC Connector performs the following functionality to copy data over from your accounting database into Microsoft CRM:

- Upload new customer accounts into CRM together with the associated contact.
- Upload new product details and default prices into CRM.
- Upload new invoices and invoice line items into CRM.

If the corresponding customer or product records already exist in CRM, then only minimal data is overwritten by the synchronisation process:

3.1.1. Customers

New customer accounts are recognised by matching the **relationship type** and the **accountnumber** fields values in CRM against the **account reference** in the accounting database.

An associated contact record is created for new customer accounts although this is not set as the primary contact.

Existing customers in CRM have the **credit limit**, **annual revenue**, and **on hold status** updated each time a new transaction or invoice is discovered for that customer. Address and contact information is not touched.

3.1.2. Products

New products are matched up against the **productnumber** field in the product catalog in CRM and are loaded up into a single pricelist which contains the standard product prices.

Existing products in CRM have the **list price** and **standard cost** overwritten during the synchronisation process but all other information including the product descriptions is not touched.

3.1.3. Invoices

Invoices are loaded up with individual pricing specified for each line item together with the tax amounts and new units are created as required. Credit notes and transactions are not uploaded.

Existing invoices are not overwritten and the amount outstanding against each invoice is not available within CRM although the current balance is shown in the CRM account record.

3.2. Creating Invoices from the CRM Sales Cycle in Sage Line 50

Two-way integration is supported with Sage Line 50 only although we do have the capacity to supply a version for Sage 200 and can integrate with most accounting systems on a consultancy basis.

The upload process is triggered by setting the appropriate status on a sales order (or invoice) record in CRM. The accountant will usually run the Uploader software to load any new customers and products into the accounting database before uploading the new invoices. This allows an opportunity to update the nominal codes and VAT rate against the products before uploading the invoices.

4. Installation

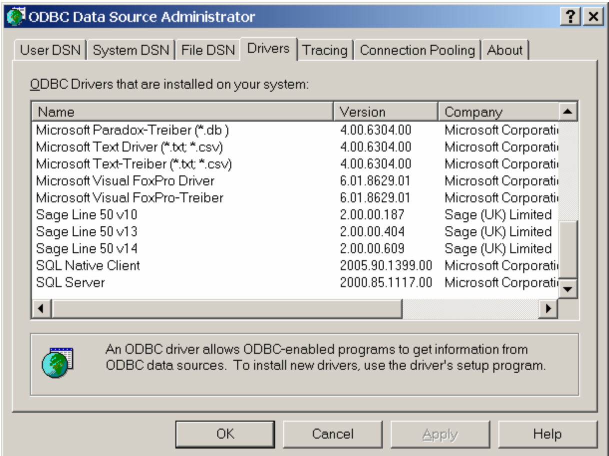
SYNC Uploader typically runs on a workstation that is already running the accounting software and requires .NET framework 2.0 to be installed If you are running Windows XP You can install the .NET framework using Windows Updates or download from the Microsoft website.

4.1. Sage

4.1.1. Sage ODBC Driver

SYNC Uploader access the accounting database using the ODBC driver provided by Sage.

The later versions of Sage Line 50 do not have the ODBC driver installed by default. You can view the currently installed drivers from the control panel by selecting **Administrative Tools-Data Sources(ODBC)** and choosing the **Drivers** tab as shown below.



If you cannot see the appropriate driver for your version of Sage Line 50 (or Sage Instant Accounting), then look at the installation folder of your local Sage installation (usually **C:\Program Files\Sage\Accounts\ODBC32**) and you will find a folder called ODBC32 which contains a setup file. Make sure you have local administration rights on the machine and run the installation to load the driver.

In the case of Sage MMS and Sage 200, access is directly to the SQL Server database and you need to create the appropriate read-only login security on the database and specify the connection string in the configuration file.

4.1.2. Sage Third Party Activation

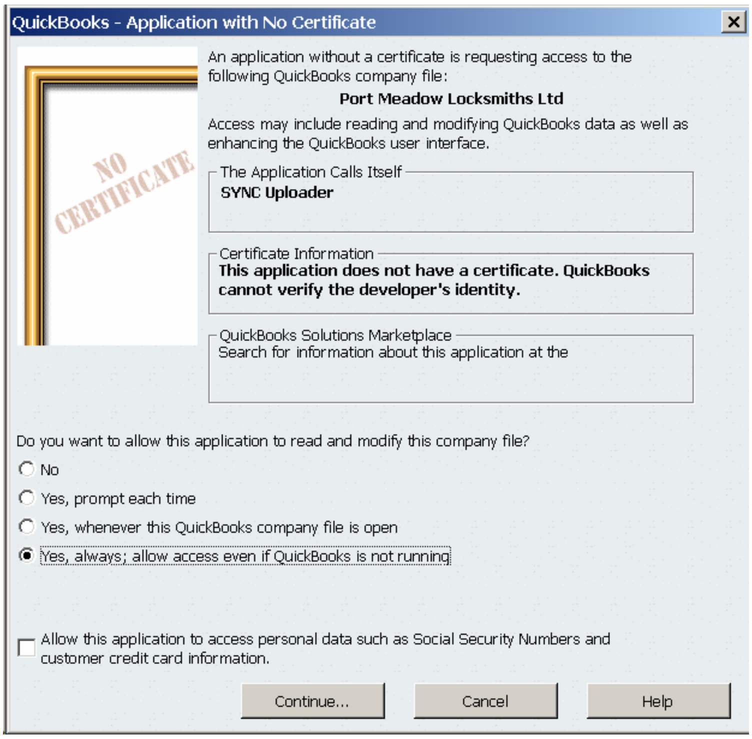
Sage Line 50 is usually installed with the Third Party Activation settings created for you. These are required only for importing data into Sage from CRM. You should check under the **Tools-Options-Third Party Activation** menu of the application to make sure the application is enabled for third party software and follow the instructions to call Sage and get hold of the activation keys if required. This service is free from Sage and you just need to provide them with the serial number for your installation.

4.2. QuickBooks

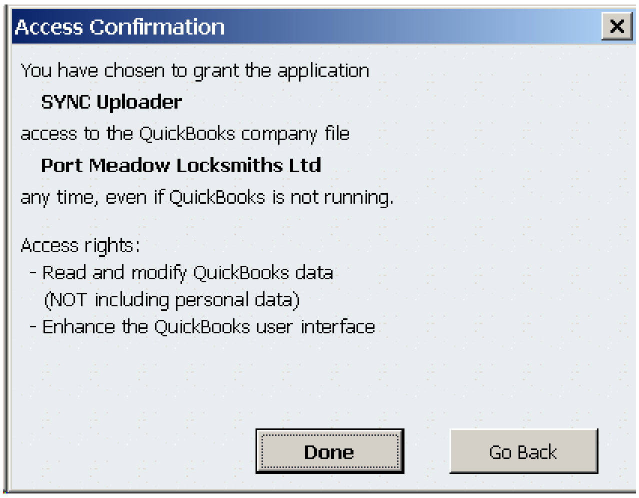
4.2.1. QuickBooks Security

QuickBooks needs to be running on the machine you are using for the SYNC Uploader to work. You are prompted to allow access to the accounting database when you first run a query from the Uploader. You can choose the level of access you allow to the application as shown below.

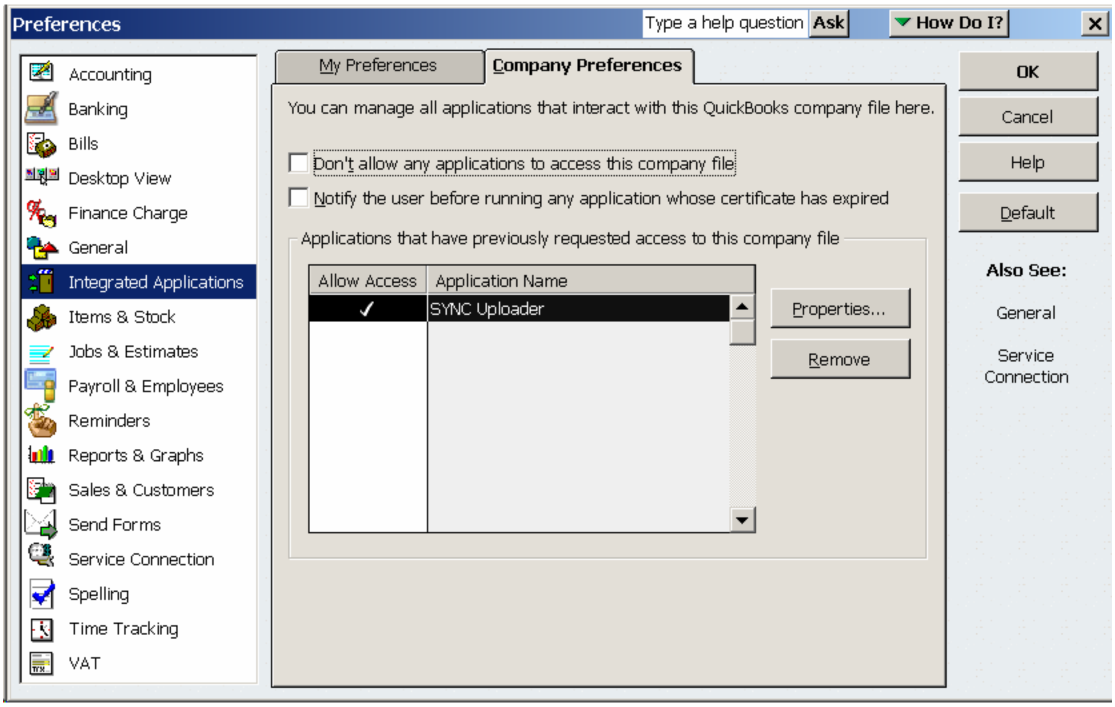
Note that this version of the SYNC Uploader does not have a certificate so ignore the subsequent warning.



You will see the following dialog once access is granted.



You can change or remove the access at any time from the Edit-Preferences section of your QuickBooks application.



4.2.2. AccountNumber Customisation

QuickBooks integration will upload using the **fullname** identifier on the account which can be longer than the default **accountnumber** field specified for an account. You should customise (and publish the changes) the account table in CRM to increase the length of the accountnumber field to accommodate your data (perhaps 60 or 100).

4.3. Edit the Config file

Installation of the Uploader application involves unzipping and copying the files to a folder and configuring system by editing the **syncupload.exe.config** file.

This is not a particularly easy installation process as there are a lot of values to set and these values need to be set to match your system. A good way to implement is to edit the sample configuration file and replace values with those appropriate to your system.

Often our resellers or ourselves will install the system for you for a small fee by accessing your system over a VPN.

Some preparation is useful before editing the config:

- Identify the version of Sage and the folder containing the accounting data and a valid user name and password. We recommend that you create a new user if you are updating values into Sage.
- Create a default pricelist in CRM with a Unit Group and default Units.

If you are performing two way uploading back in to your accounting database you will need to do the following tasks or find the following information:

- Find out the default nominal code for new products.
- Choose or create a product in the accounting system to be used with write-in products (that do not have a product code). Otherwise the system will use the Sage default of S1.
- Create new statuscode values for the sales order entity in CRM to indicate **Ready for CRM** and **Uploaded into Sage** status.
- Optionally create a text field in sales order to receive the sage invoice number.

4.3.1. License Key

You may install the software without a license but will be restricted to selected accounts only for upload. Please email sync@redware.com or contact your reseller for your serial number and activation key.

```
<add key="sync.uploader.serial″ " value=""/>
<add key=" sync.uploader.key" value=""/>
```

The following setup defines a system that integrates Sage Line 50 with CRM 4.0.

Set the **sync.targetmode** as **CRM30** or **CRM40** according to your version of CRM and your **sync.sourcemode** to **QUICKBOOKS**, **SAGE50**, **SAGEINSTANT**, **SAGEMMS**, or **SAGE200** according to your accounting system software.

```
<add key="sync.sourcemode" value="SAGE50"/>
<add key="sync.targetmode" value="CRM40"/>
```

4.3.2. CRM Connection

The Uploader needs to access the CRM database using the web services. The **crm.server** setting should point to the CRM Server and the **crm.user**, **crm.password, crm.domain** value can be left blank if you want the Uploader to assume the identity of the currently logged on user. We recommend however that you specify user credentials here that have the required access and privileges on the database and CRM.

```
<add key="crm.connection" value=""/>
<add key="crm.url" value=""/>
<add key="crm.server" value="http://192.168.1.105:5555/"/>
<add key="crm.user" value="administrator"/>
<add key="crm.password" value="pass@word1"/>
<add key="crm.domain" value="litwareinc"/>
```

The **crm.customertypecode** specifies the picklist value for the **relationship type** field on the account to be used to identify customer accounts. You can view the picklist values for your CRM installation by customising the account entity and looking at the values against the **customertypecode** attribute. The default value for a customer is 3 and 10 for a supplier.

```
<add key="crm.customertypecode" value="3"/>
<add key="crm.suppliertypecode" value="10"/>
```

You need to create a **pricelist**, with a default **Unit Group** and default **Units** in CRM before uploading products. Specify the values with these settings:

```
<add key="product.defaultschedule" value="Demo"/>
<add key="product.defaultunits" value="Each"/>
<add key="product.pricelevel" value="Demo"/>
```

You should specify default values for the **quantitydecimal**, **producttypecode**, and **roundingpolicycode** values on the product entity. Once you have uploaded a product, you can change these values and they will not be overwritten. Our recommended defaults are specified below and take care that the values you specify do exist:

```
<add key="product.quantitydecimal" value="2"/>
<add key="product.producttypecode" value="1"/>
<add key="product.roundingpolicycode" value="1"/>
```

4.3.3. Sage Line 50 Configuration

The Sage mode has values SAGE50 and indicates the version, the folder containing the accounting data, and a user name and password. You also need to specify the version against the **sage.object** setting.

We recommend that you create a specific username and password for the Uploader program if you are performing two-way integration and passing data back into Sage.

```
<add key="sage.mode" value="SAGE50"/>
<add key="sage.version" value="13"/>
<add key="sage.folder" value="C:\Program
Files\Sage2007\Accounts\DemoData\Accdata"/>
<add key="sage.user" value="MANAGER"/>
<add key="sage.password" value=""/>
<add key="sage.object" value="SDOEngine.13"/>
```

4.3.4. Two-Way Integration for Sage Line 50

Set the following values if you are loading data back into Sage from CRM. The Uploader will look at the default nominal codes set against a product but requires defaults when uploading new products. Create and specify the default product to be used if there is no product code against an item for upload.

We suggest that you upload products first and then set the nominal values as you like in Sage before uploading invoice items.

```
<add key="sage.defaultproduct" value="MISC"/>
<add key="sage.defaultsalesnominal" value="4000"/>
<add key="sage.defaultpurchasenominal" value="5000"/>
<add key="sage.defaultcurrency" value="GBP"/>
```

Set up the configuration for the optional text field in the sales order table to receive the Sage Invoice Number and also the status code values for sending a sales order to Sage (**sync.invoicestatus.get**) and to indicate a successful update (**sync.invoicestatus.set**):

```
<add key="sync.invoice.field" value=""/>
<add key="sync.invoicestatus.get" value="200000"/>
<add key="sync.invoicestatus.set" value="200001"/>
```

4.3.5. QuickBooks

There are no additional settings for QuickBooks other than the **sync.sourcemode** and **sync.defaultcurrency** settings. You will need to provide access to the application within QuickBooks as discussed in a previous section.

4.3.6. Sage Instant Accounting

The **sage.mode** above is set the **SAGEINSTANT** and the correct ODBC driver string must be specified as shown below.

```
        <add key="sage.instant.connection" value="DRIVER=Instant Accounting 2000
v6;UID=MANAGER;DIR=C:\PROGRAM FILES\SAGEINSTANT2000\ACCDATA\"/>
```

4.3.7. Sage MMS and Sage 200

Remember to set the **sync.targetmode** and **sage.mode** values to the appropriate sage setting and then add the connection string below after creating a read only user on the database:

```
<add key="sage.mms.connection"
value="server=red001;database=sagemmsdatabase;UID=CRMSage;PWD=redware;Language=British
"/>
```

Or

```
<add key="sage.200.connection"
value="server=red001;database=sage200database;UID=CRMSage;PWD=redware;Language=British
"/>
```

4.3.8. SYNC Accounting

The following settings are required if you want to upload into the SYNC Accounting access database to provide further accounting information for CRM (see the documentation for SYNC Accounting):

```
<add key="sync.mode" value="ACCESS"/>
<add key="sync.mdb" value="c:\dev\vs2005\syncupload\data\syncupload.mdb"/>
<add key="sync.company" value="6"/>
<add key="sync.outputfolder" value=""/>
```

4.3.9. Micellaneous

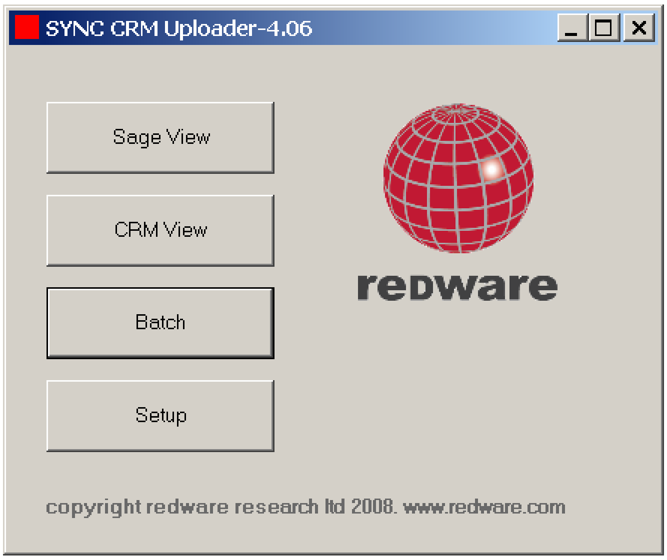
These are historical values and not yet documented.

```
<add key="product.producturl" value=""/>
<add key="sync.accessfilepath" value=""/>
```

5. Home Page

The home page appears when you run the application:

- **Sage View** accesses the accounting data and lets you view customers, products, invoices and transaction as well as upload these entities into CRM.
- **CRM View** lets you view the customers, products, and orders (or invoices) that are ready to load into the accounting database (only for Sage Line 50).
- **Batch** automatically processes data from the accoutring system into CRM. Note that two-way integration from CRM into Sage is possible only manually with the CRM View form.
- **Setup** does not allow you to set up the config file but does allow you to perform diagnostics on the current settings in case you have problems when first installing your system.

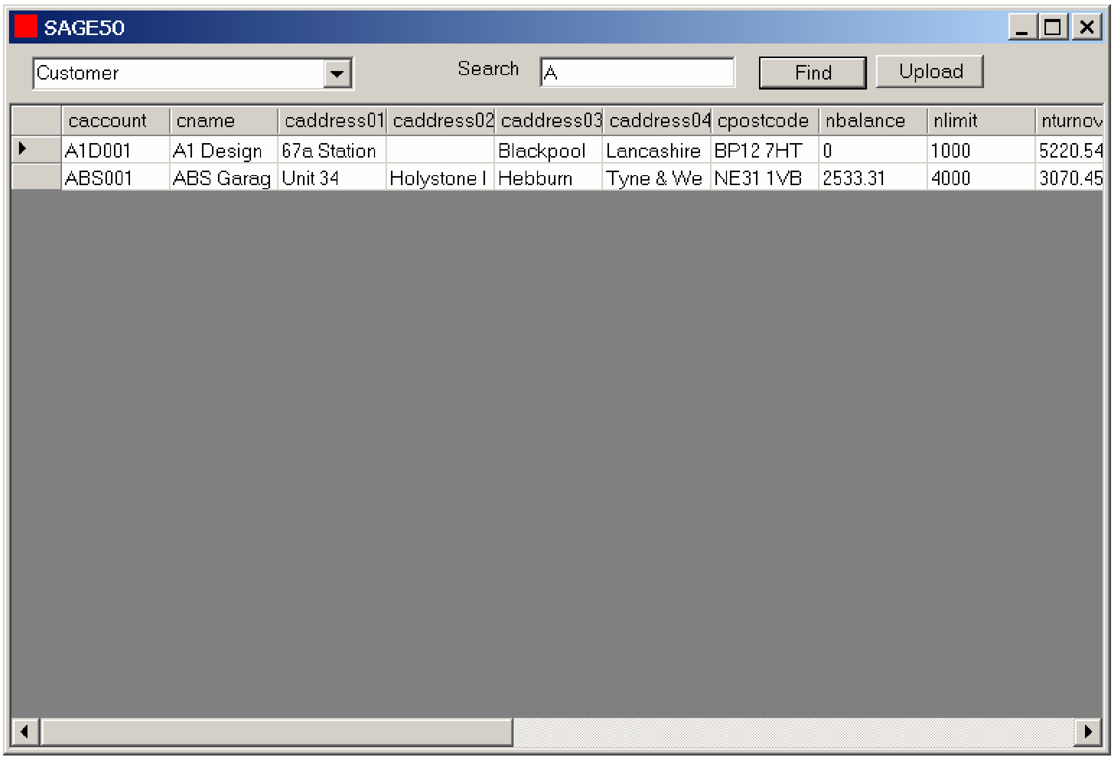


Note that updating Sage Accounting is possible only with Sage Line 50 although updating CRM is possible from Sage Instant Accounting and Sage MMS and Sage 200.

Please contact us if you would like to update your Sage 200 data from CRM or need some help to integrate with your accounting system.

6. Sage/QuickBooks View

This form allows you to view various entities within the accounting database and selectively upload records into CRM. You should use this when first installing and testing the software and can rely on the batch process once you are confident that things are working well.



The available entities are shown in the drop down at the top left of the form and a selection of records can be made by entering a few letters into the search textbox before pressing the **Find** button:

- **Customers** are searched for on the account reference field.
- **Products** are searched for on the product reference field.
- **Invoices** are searched for using the account reference.
- **Invoice** Items are searched for using the account reference.
- **Transactions** searched for using the account reference.

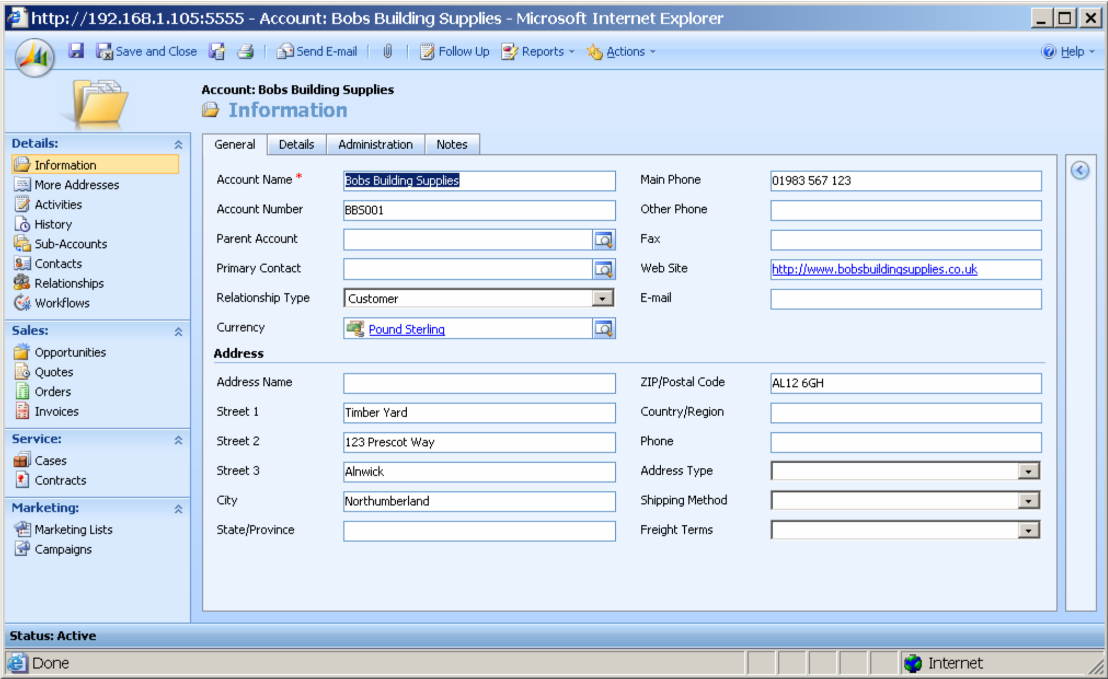
Note: The evaluation version of the SYNC Uploader will only allow accounts and products with the first letter in the range A-G.

The selected records (except for invoice items) can be uploaded into CRM by pressing the **Upload** button which will upload the associated **customers**, **products** (and **units**), **invoice**, and **invoice item** records as required. Remember that records that already exist in CRM are only partially updated.

Note: The Uploader is not yet multi-currency and simply uses the default currency of the user credentials specified in the configuration file.

6.1. Uploading Customers

SYNC Uploader assumes that all sales accounts are companies and uploads into the account entity of CRM after checking for existing records by checking against the **relationship type** and the **account number** fields.



Only three fields are updated if the customer record already exists:

- **Annual Revenue**
- **On Hold Status**
- **Credit Limit**

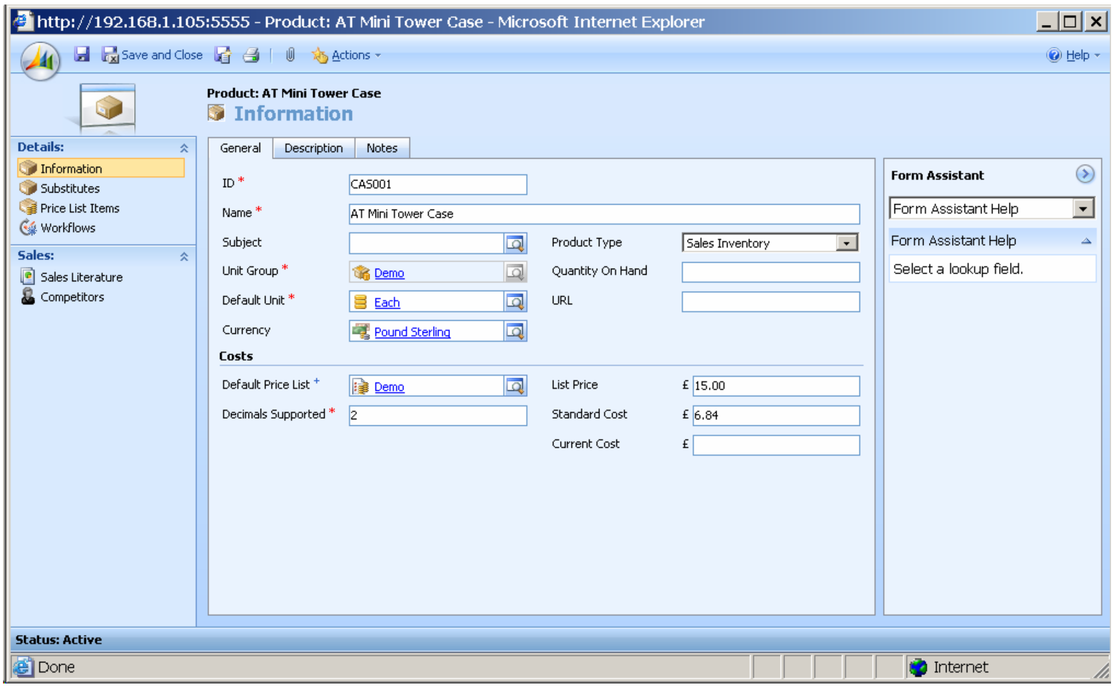
The Uploader does not check any records with a blank account number or with a different relationship type to the one specified in the configuration. Consequently if duplicate records are created, you will need to use the **merge** feature within CRM to merge the records. Be careful with the user credentials you specify in the configuration file and make sure that the appropriate security roles and privileges are set within CRM. The Uploader needs at least read-access to all the customer records for example otherwise duplicate records will be created.

The contact details held against the account in the accounting database are uploaded as an associated **contact** record although this is not set as the primary contact.

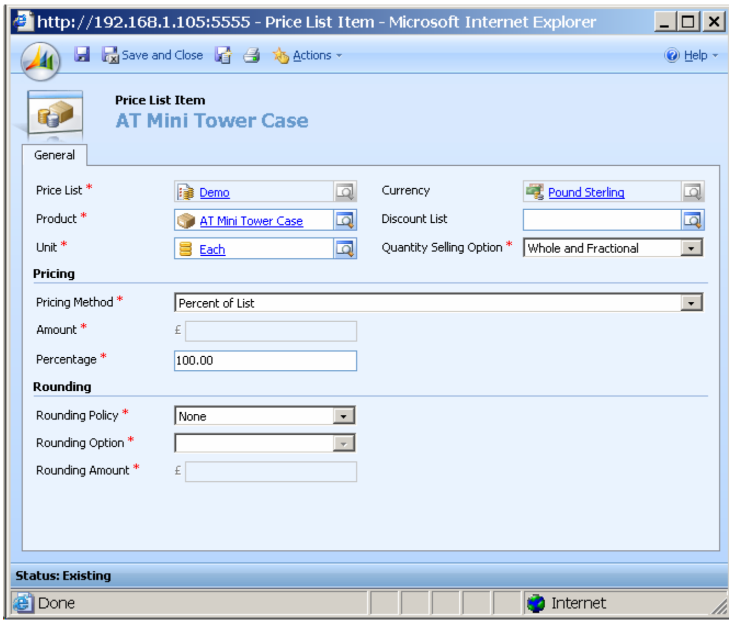
Note: *QuickBooks has account numbers specified only on selected accounts. If the account number is not specified, the unique fullname of the account is used as the accountnumber. This is often larger than the default width of the field in CRM and you will need to customise the accountnumber field to be a larger size as noted in the installation instructions. We do not currently support Contacts and B2C functionality in CRM so retail accounts will be loaded up as accounts in CRM (with an associated contact record).*

6.2. Uploading Products

Products are uploaded if an no existing record is found by matching the **product number** field in the product catalog. All products are loaded into a single pricelist and the **Pricelist** and **Unit Group** (and the **default Unit**) must have already been entered into CRM and set up in the config file.



The associated Price List Item is created for each product and assigned a value set to 100% of the list price of the product record.

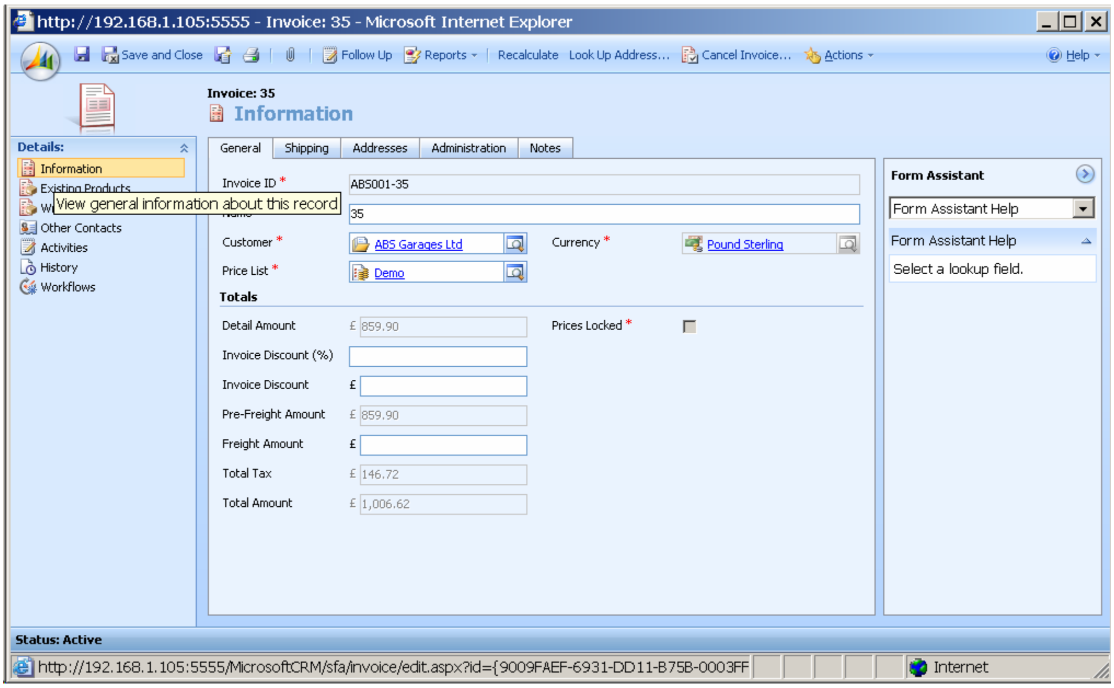


Uploads of a product that already exists in CRM check that the price list record exists but updates only the following fields in the associated product record:

- **List price**
- **Standard cost**

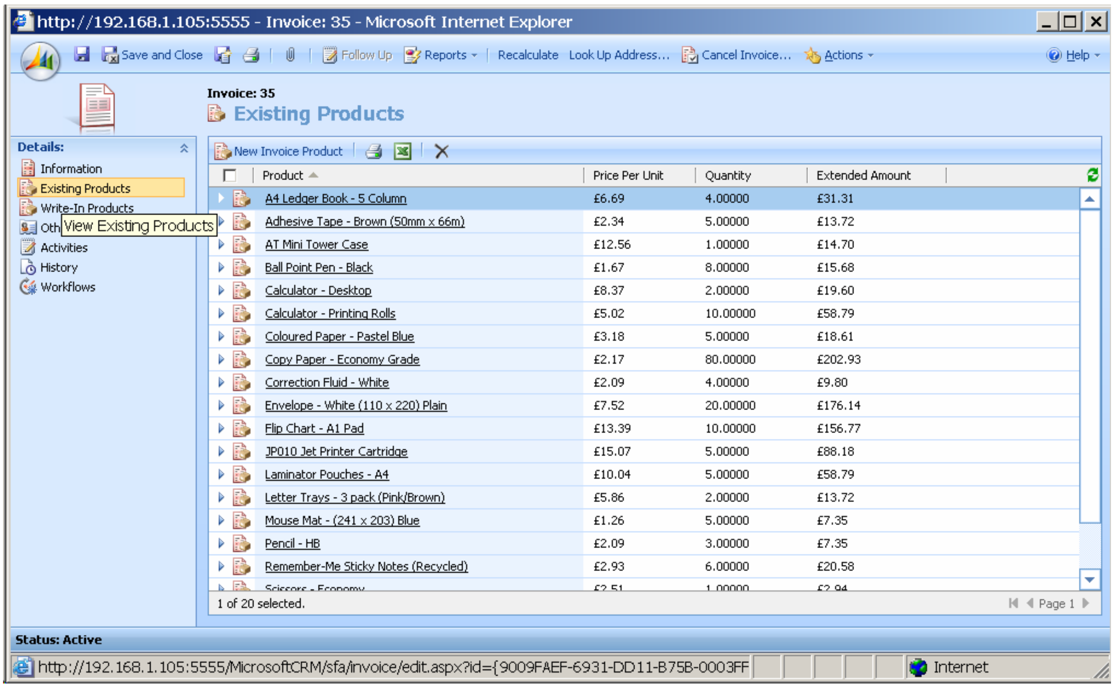
6.3. Uploading Invoices

Invoices are loaded against the corresponding account and given an Invoice ID of the account number and invoice number separated with a hyphen. The invoice number is copied into the name field and the default pricelist selected.

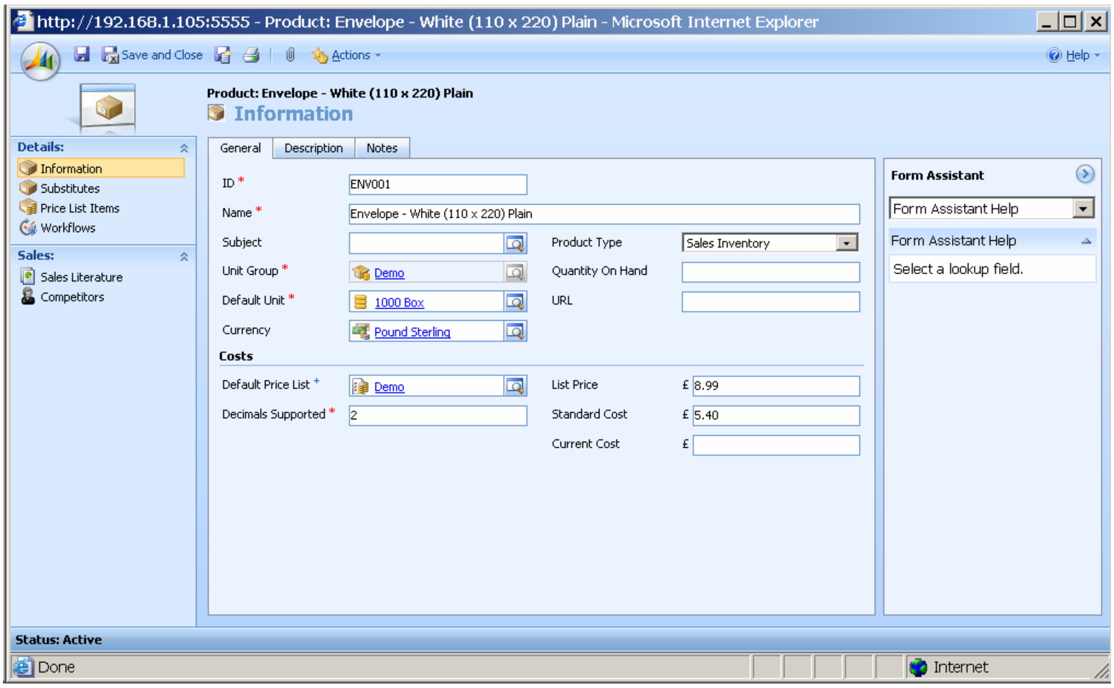


Products are uploaded using existing products where possible and as write in products where no product is found for the item in the accounting database. The product description for both types of item is written into the description field of the product item.

Note: *Sage uses product codes S1, S2, S3 for miscellaneous products and M for a note which are loaded as write-in products by the Uploader.*



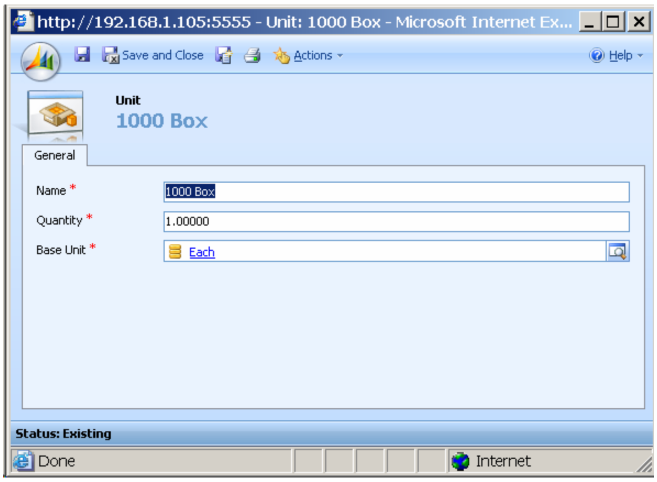
All items override the product price and contain the price per unit, the quantity, tax amount, and total price. Discounts are not uploaded and the outstanding amount for each invoice is not available here.



The default values for the product type and decimals supported are set in the config file.

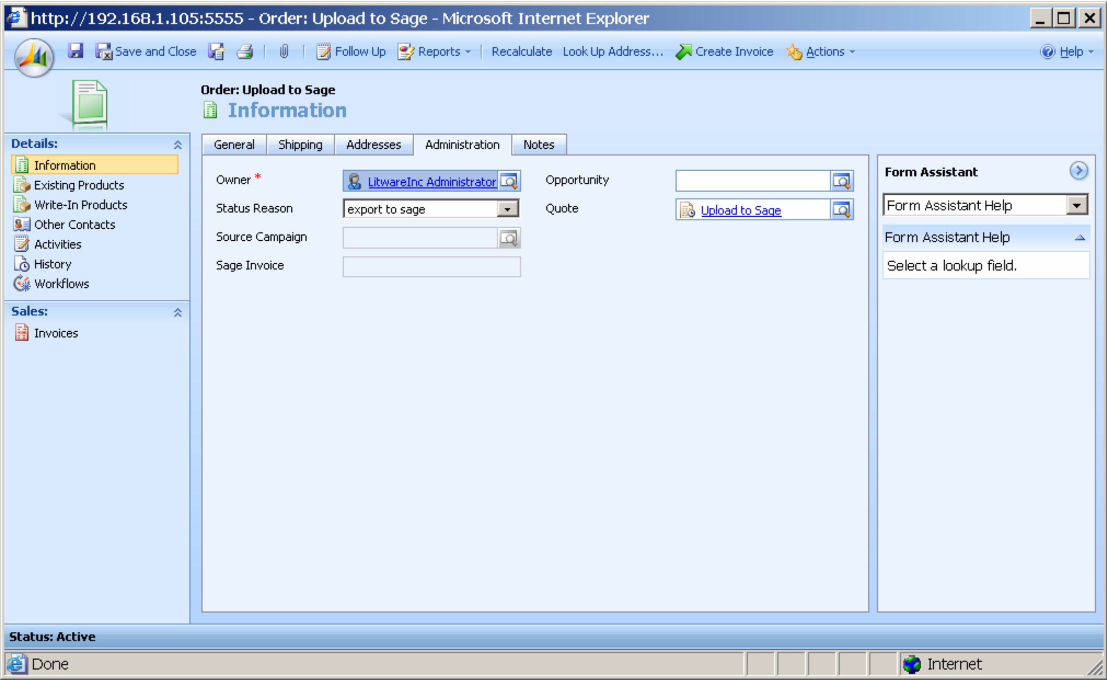
Note: See information on our SYNC Accounting product to see how to view outstanding invoices, credit notes, and other account data from within CRM.

New units are created in the default unit group where necessary so the units can be uploaded from the accounting package. The Uploader does not however work out how many of the primary unit are represented here and you will need to overwrite this value if you are to use this manually within CRM.



7. CRM View

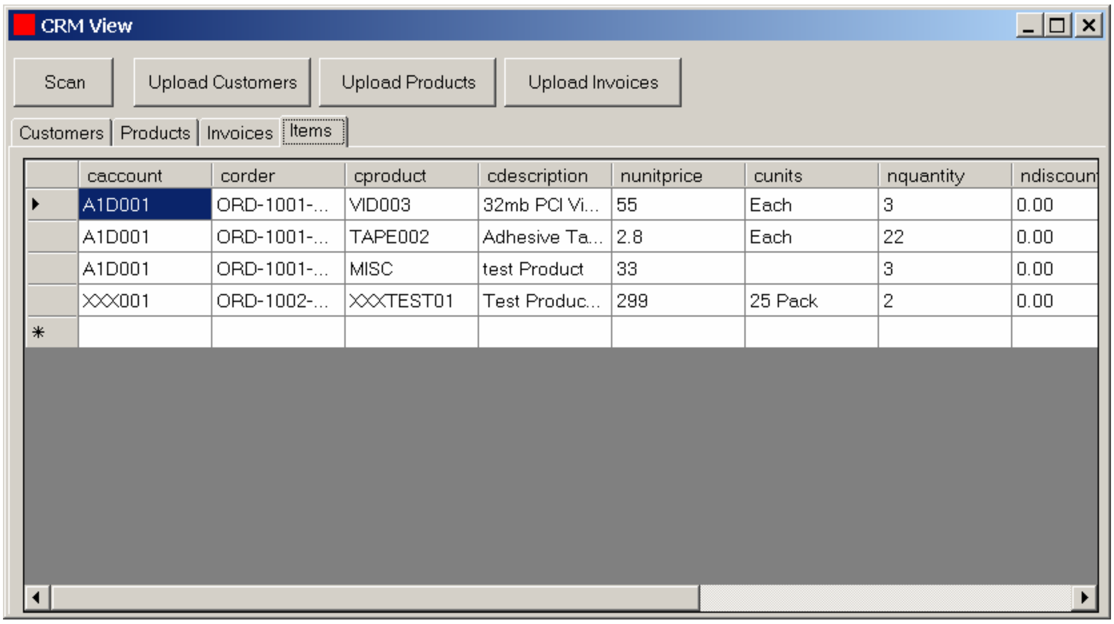
Sales Orders within CRM need to have the appropriate **status reason** field set to appear in the CRM View. You should create two status codes for the sales order table one to indicate that the sales order is ready for processing into sage and the second to indicate that the record has been uploaded. You can also create a text field to contain the invoice number for reconciliation purposes. The names of all these fields and values must be set up in the configuration file.



The CRM View is used for uploading sales orders into your accounting database. Currently we only support Sage Line 50 for this process. The Scan button is used to show all the customers, products, invoices, and invoice items associated with any sales orders waiting to be processed.

The CRM View form allows you to view four different entities:

- Customers associated with the invoices to upload.
- Products associated with the invoices to upload.
- Invoices to be created from the appropriate sales orders.
- Invoice items to be uploaded.



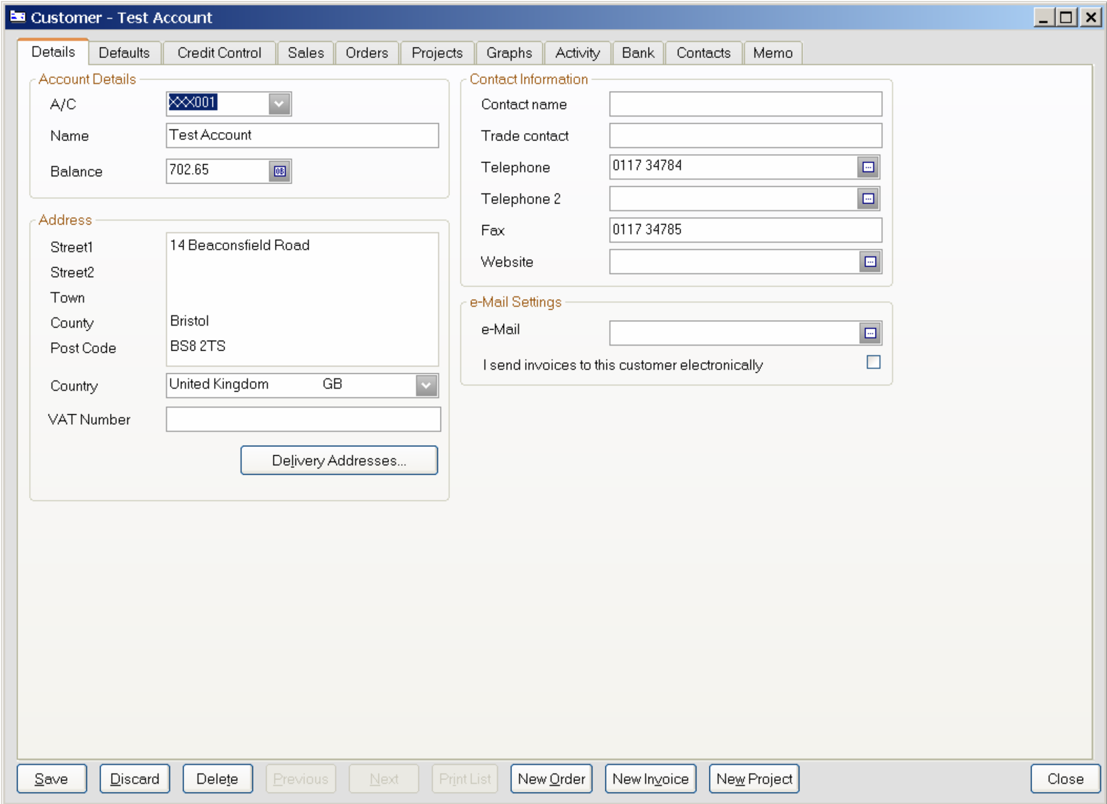
Note: *We are planning a release of the software that will let you upload from Invoices instead of Sales Orders.*

Accountants normally upload the customers and products into the accounting database first and make sure that the correct nominal accounts and tax codes are set up before importing the invoices.

7.1. Customers

Customer records are only imported into the accounting system if the account number does not already exist in the sales ledger. Existing account data in the accounting database is never touched if the account has already been created in the accounting system.

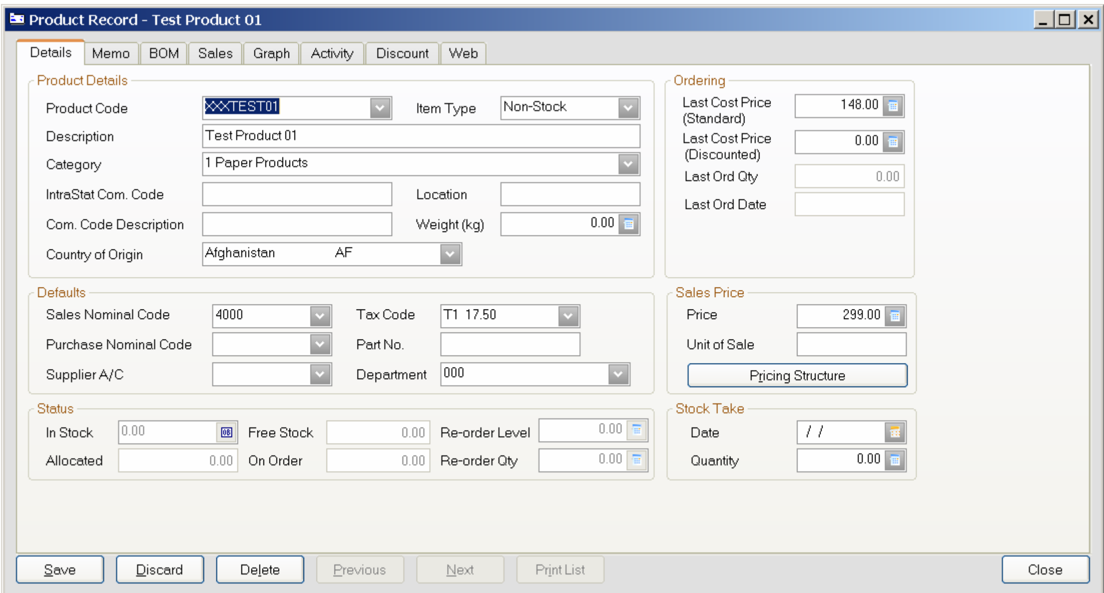
You will need to edit the appropriate account record in CRM if the desired reference has not been entered in the **accountnumber** field. Take care not to duplicate values for the account number as the Uploader simply looks at the **accountnumber** to identify the account for uploading invoices and does not check the company name or other information.



7.2. Products

Product records can be imported into the accounting system and are give the default nominal ledger values specified in the configuration file and are set up for tax.

You should edit the product record to change some of the defaults before uploading invoices so the correct tax and nominal codes are applied by the accounting system.

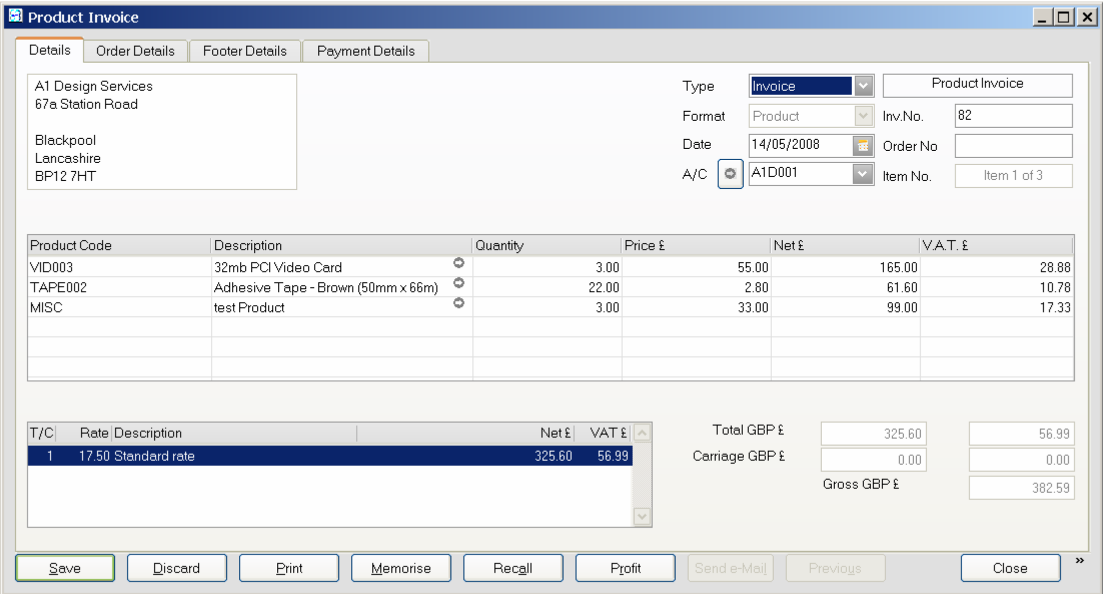


Tax is ignored for the purposes of the upload and recalculated according to the tax codes setup for the product in the accounting system. **Product prices** are always ignored and the value specified in the sales order is applied.

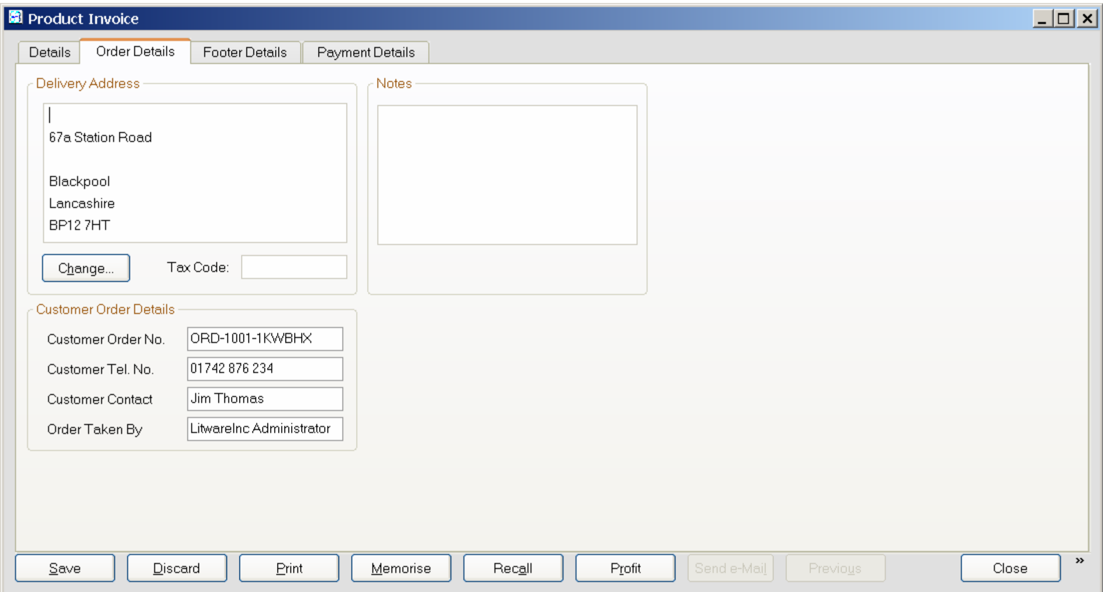
The **Department** for is specified as the owner name and will only be set if the appropriate department is entered in the accounting package.

7.3. Invoices

Sales Orders are uploaded as **product invoices** in Sage and can be reviewed (or deleted) before posting to the sales ledgers in Sage. The Sales Order status is updated and the Sage Invoice number is recorded (optionally) in the Sales Order record for future reference. You may want to complete these records in CRM so they cannot be edited and set into the accounting system again.



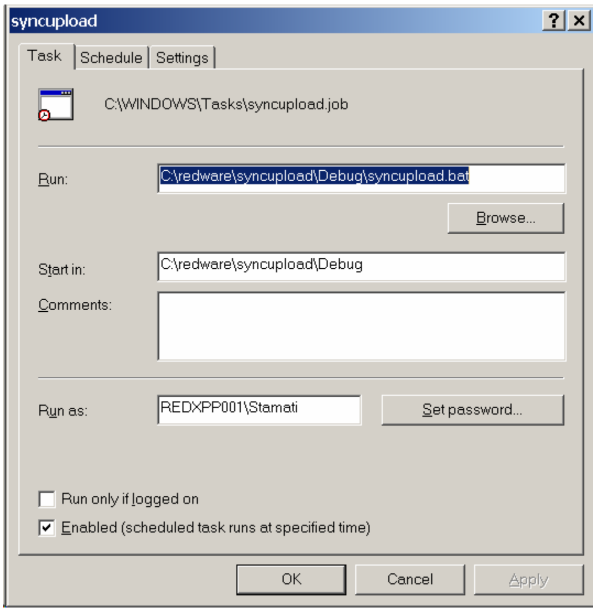
The **order number** from CRM is recorded in the invoice for reconciliation purposes and the **owner** specified as the taken by contact.



8. Batch

The Batch button on the home page will upload data from all sales accounts in the accounting database into CRM. The system uses the transaction numbers in the audit trail of the accounting database to process only records that will have changed since the last upload.

This process can be set up to run automatically (say every couple of hours) with the task scheduler that can be found in the control panel under **Scheduled Tasks** (you may have to create a task for each time that you want to run during the day).



Create a text file named **syncupload.bat** with the following commands and schedule to run periodically under the appropriate user credentials:

```
C:
cd \program files\redware\syncupload
syncupload.exe batch
```