100PcVatFreeBridge is a stand-alone bridging App for communicating With HMRC's MTD VAT service.

100PcVatFreeBridge
User Manual

Comsci Ltd

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1   Overview

100PcVatFreeBridge is a stand-alone bridging App for interacting with HMRC's Making Tax Digital VAT service.

It provides a method of submitting VAT returns from accounts held in Excel spreadsheet (XLS, XLSX, XLSM) or Comma Separated Value (CSV) format.

It can retrieve VAT obligations, Submit VAT returns, Retrieve previously submitted returns and view VAT liabilities and payments.

1.1   Requirements

64 bit Windows, Linux or Mac PC or Laptop

Internet access.

Installed 100PcVatFreeBridge application

VAT records held in spreadsheet or CSV format. Compatible with Microsoft Excel (1997 or later) and OpenOffice / LibreOffice data (saved as .xls, not .ods).

Quarterly / Monthly or Annual returns based on VAT box 1 to 9 figures are supported, hence includes cash accounting, flat rate schemes etc.

1.2   Installation
Follow the instructions appropriate for your PC type:

64 bit Windows
For 64 bit Windows PCs, download and run the 100PcVatFreeBridge installer executable. This will install the application on your computer.

Linux
Download the appropriate .deb file, and put it somewhere that you'll be able to find later. I'd recommend putting it into /tmp as i) it's easy to remember, ii) it'll clean itself up when you reboot, and iii) it's writeable by all users.

Open up a terminal window, and enter this (edit version number in filename as appropriate):

```
sudo dpkg -i /tmp/pcvatfreebridge_1.3.6-ubuntu-20.04.deb
```

You'll need to provide the sudo (admin privileges) password for your user, which if you're the standard "first user installed on the box" will be your normal login password. Text will scroll past, and you'll be dropped back to the prompt. Close the terminal window, you're done with it.

Back in the GUI, open up the file manager and navigate to /opt/pcvatfreebridge/bin - then double click on the pcvatfreebridge executable therein. The App should then run and interact with the user. Settings are stored in the folder .100PcVatFreeBridge created in the users home directory.

If this doesn't work, (Sometimes launcher attempts to open with Document Viewer instead of running), you can run the App directly from a terminal with the command:

/opt/pcvatfreebridge/bin/PcVatFreeBridge

To create a clickable shortcut, create a file called "100Pc.desktop" on your Desktop with the contents:

```
#!/usr/bin/env xdg-open
[Desktop Entry]
Version=1.0
Type=Application
Terminal=false
Exec=/opt/pcvatfreebridge/bin/PcVatFreeBridge
Name=100Pc
Comment=MTD VAT Bridge
Icon=/opt/pcvatfreebridge/lib/PcVatFreeBridge.png
```
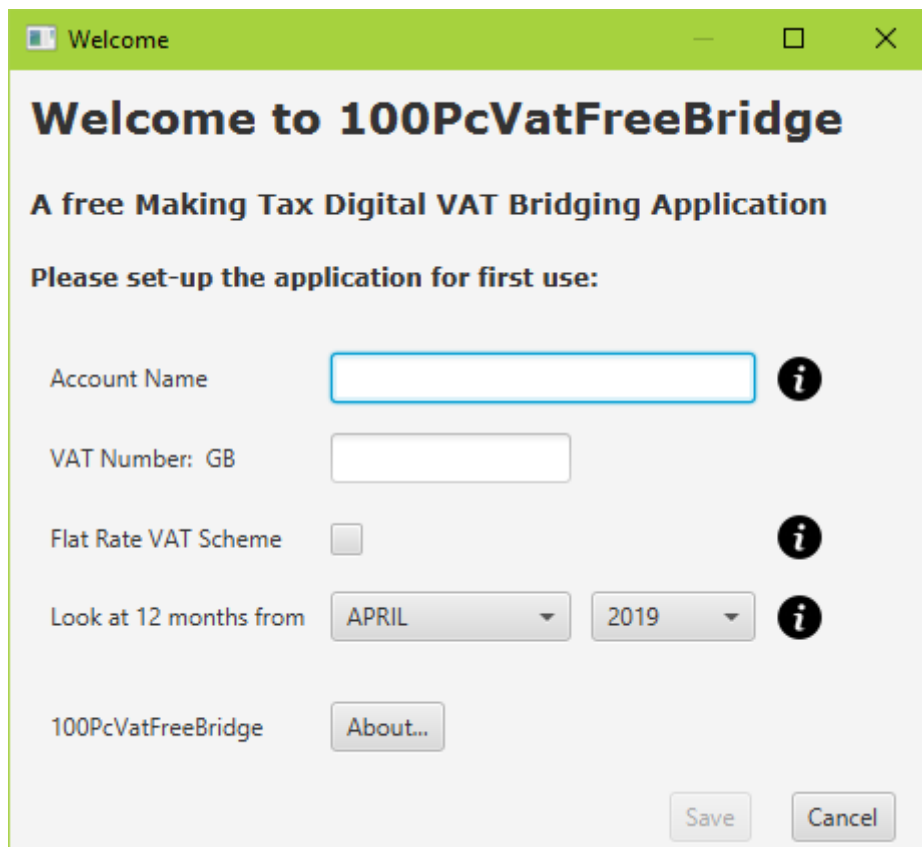
Mac

Download and install the Mac PKG distribution. You should be able to find 100PcVatFreeBridge in Applications. User data and log files are stored at

"~/Libraries/Application Support/100PcVatFreeBridge/…"

2   Running the App

On first run, you will be prompted for an account name and the VAT number:

Your account name is for your information only and can be anything suitable text string. The VAT number is checked to ensure it follows the correct pattern to represent a valid UK VAT number.

Tick the Flat Rate Scheme box if you are signed up and calculate VAT using a flat rate scheme. This setting does not alter any of the records submitted to HMRC. The figures submitted are those present and linked in your data. It merely changes the wording of Box 6 from 'excluding VAT' to 'including VAT' as appropriate for this scheme.

HMRCs MTD VAT service returns results for a maximum date range of 12 months per request. Use the month and year controls to select the period you are interested in. If you are running the 4 quarters naming scheme, then select the appropriate month to align the first quarter with the first quarter of your data.

On saving the settings, 100PcVatFreeBridge will then require authorisation to communicate with HMRC.

Press **Continue** and click through the HMRC verification procedure to sign in with your credentials and to grant permission:
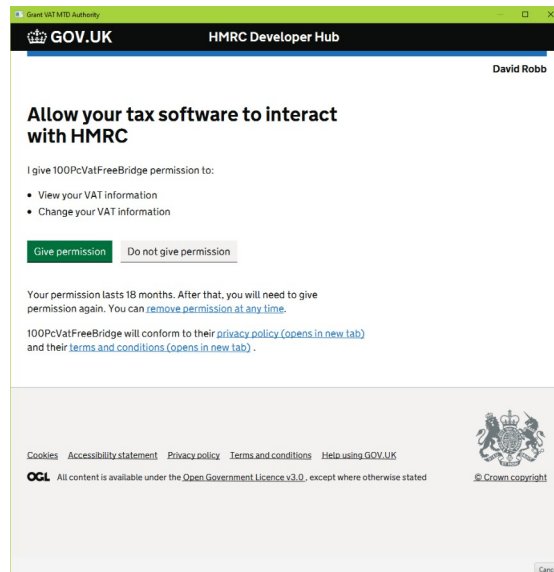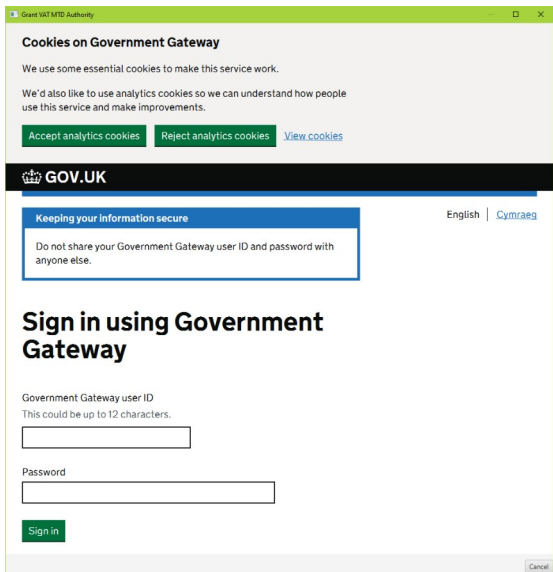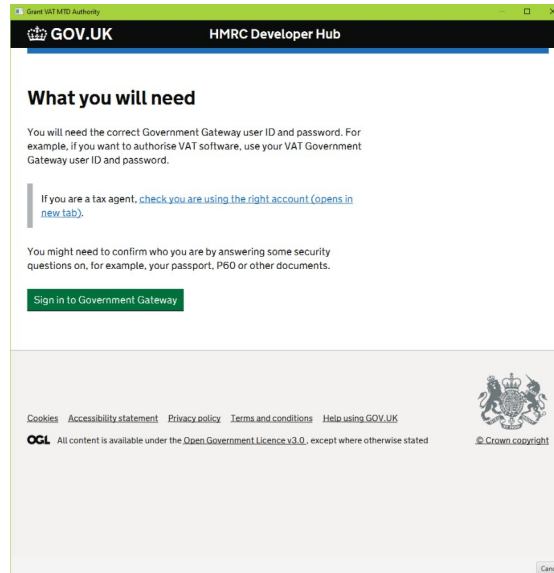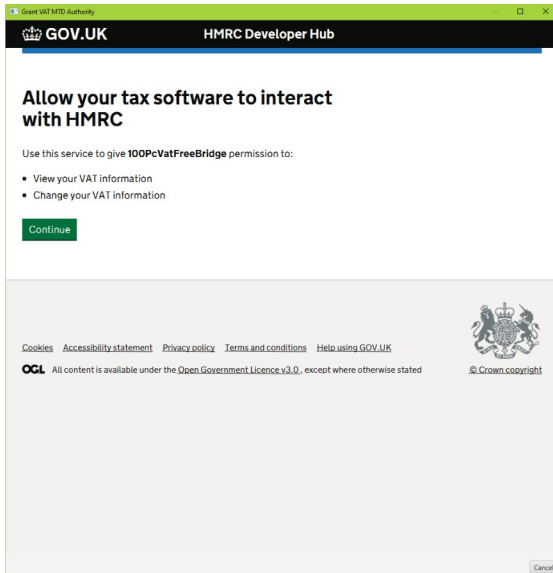
(If this screen is blank with just a cancel button then check whether your PC clock is set at the correct time. HMRC's server will not communicate with a program where the date is not within tolerance.)

(Also, if your corporation has an SSL proxy in place e.g. Symantec BlueCoat, then this process will not work as the authentication process will think it's experiencing a 'man in the middle' attack. Contact your IT dept to resolve the issue)

Having successful granted authority, you should be presented with a list of your current VAT obligations:
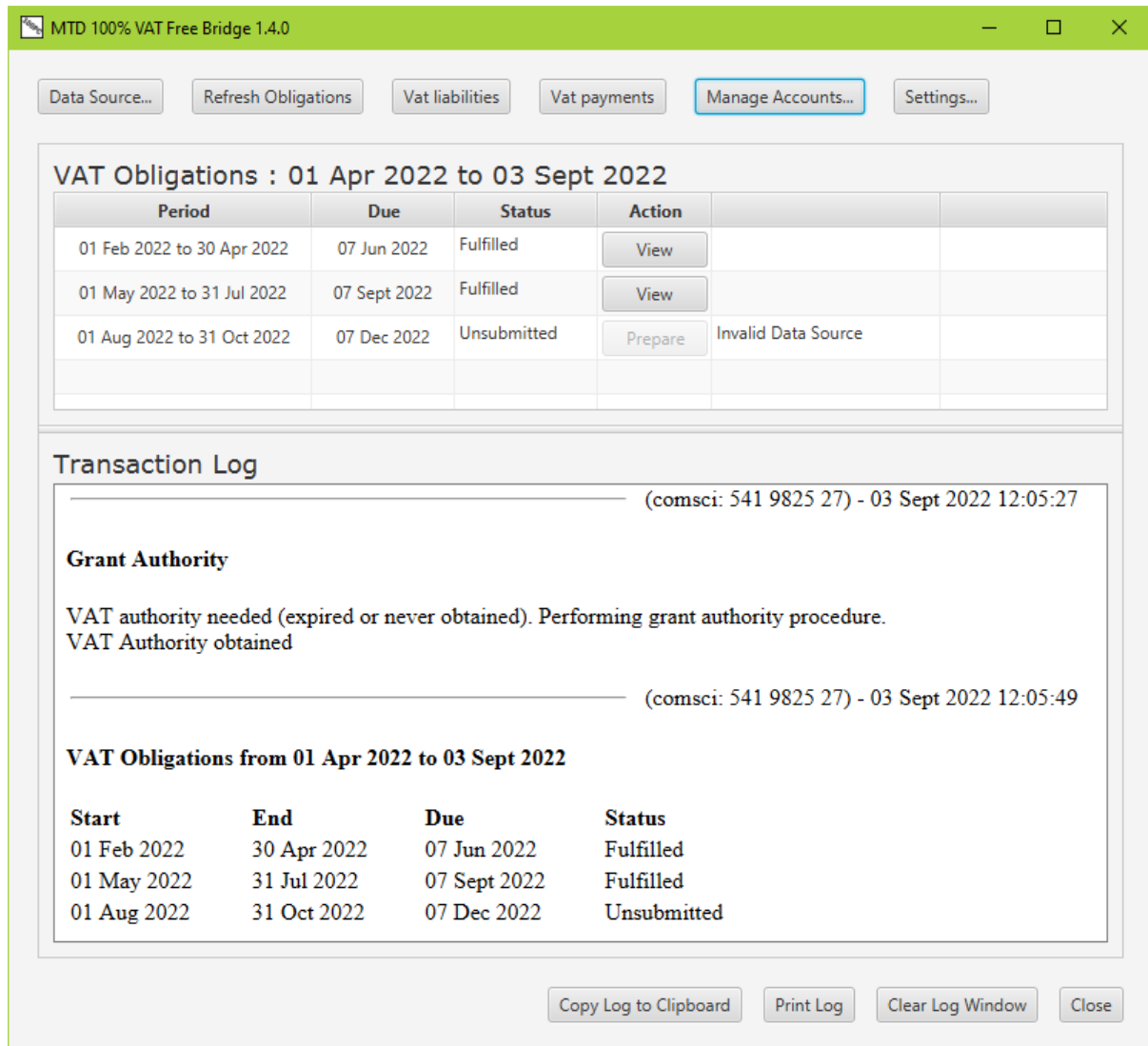
If you get no obligations or the Status code "CLIENT_OR_AGENT_NOT_AUTHORISED", check the troubleshooting section at the end of the manual.

You'll note that the Prepare button is disabled and an error message "Invalid Data Source" is displayed. In order to submit a VAT return we need to tell the App what data to use.

2.1   Preparing your Data

100PcVatFreeBridge requires a data source file to submit a vat return. It is your responsibility to ensure that the correct source file is selected and the correct figures are extracted.

100PcVatFreeBridge needs to know how to interpret your accounts data. i.e. which figures correspond to what VAT return values. You perform this by marking your spreadsheet data with 'Named Cells'. This is better than using absolute cell references as the values will not be lost if you edit your spreadsheet by adding or removing cells.

Note. 'Named cells' has nothing to do with any text data displayed in the spreadsheet. It is a way of setting metadata behind the scenes that describe specific cell contents. In windows Excel, it is as simple as right clicking on the cell with a VAT value that you want to submit, selecting Define Name... and entering the appropriate Qn_VAT_BOXn name

This link also explains how to name cells and manage named cells in Excel:

https://support.office.com/en-ie/article/define-and-use-names-in-formulas-4d0f13ac-53b7-422e-afd2-abd7ff379c64

There are two naming schemes used by 100PcVatFreeBridge. 100PcVatFreeBridge will automatically select the naming scheme based on the names it finds in the spreadsheet. So if you wish to switch from one scheme to the other, please delete the names that are no longer required. This can be done in Excel using the name manager.

Choose the appropriate scheme to fit you spreadsheet data:

Four Quarters Naming Scheme. Data is contained in a single Excel format workbook (XLS file) that contains all 4 quarterly VAT spreadsheets for the year.

Single Return Naming Scheme. Data is a single spreadsheet (XLS file) or CSV (comma or tab delimited) text file containing the data for your current VAT return. Also appropriate if your data is automatically generated from another accounts package, or you want to use absolute cell references, or you file monthly or annually.

Excel data - Four Quarters Naming Scheme

If you are using the Four Quarters Naming Scheme, as a minimum, for your first VAT return, 100PcVatFreeBridge expects these names to be present in your Excel spreadsheet:

e.g. for Quarter 1

Q1_VAT_BOX1
Q1_VAT_BOX4
Q1_VAT_BOX6
Q1_VAT_BOX7

These names need to refer to a single cell with a numeric value (or formula) present
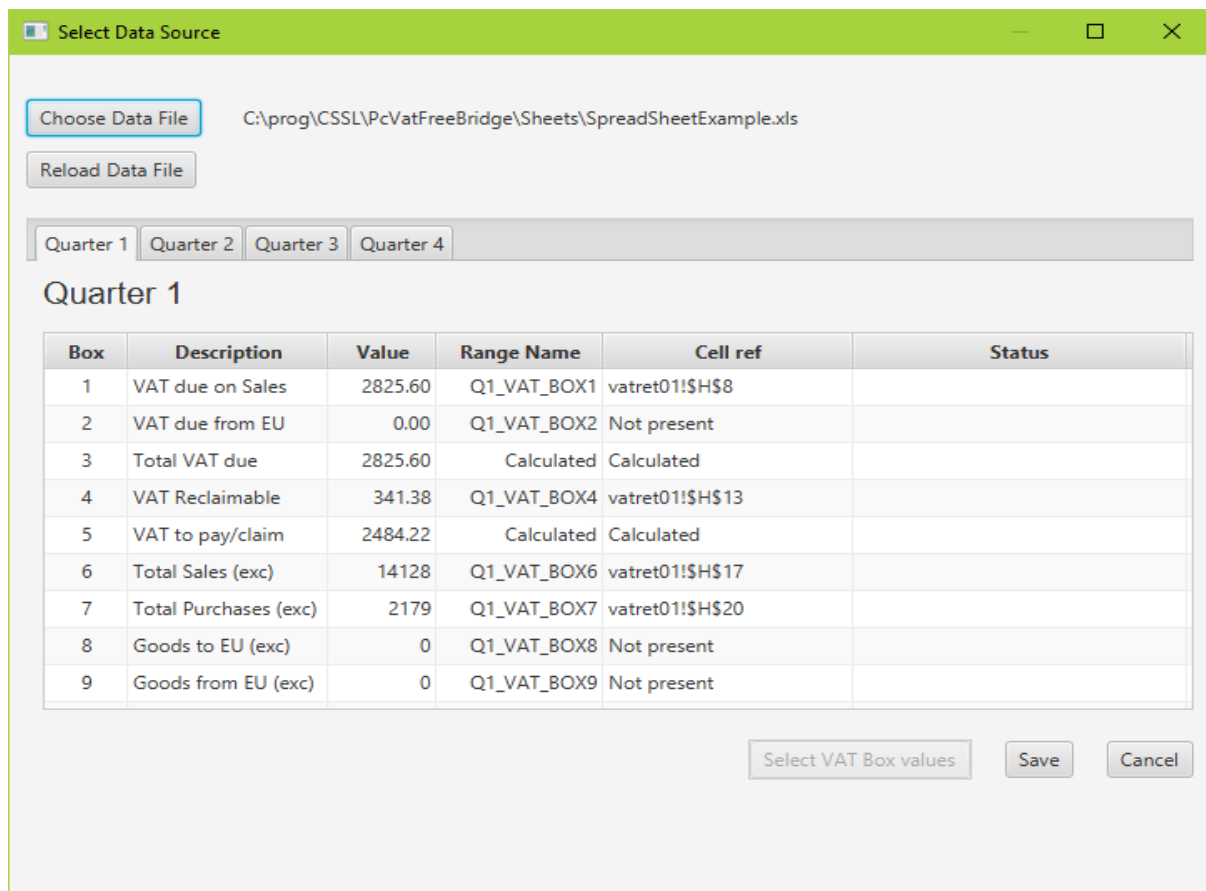The following named ranges apply to EU data and will be used if present or assumed to be zero if not

Q1_VAT_BOX2
Q1_VAT_BOX8
Q1_VAT_BOX9
BOX3 and BOX5 values are calculated from the supplied data.

For subsequent returns in any 12 month period, simply substitute 'Q1' with Q2, Q3, Q4 as appropriate. 100PcVatFreeBridge can handle all quarters present in the same spreadsheet. 100PcVatFreeBridge opens your files read_only so will never write to or modify your spreadsheet data.

Select Data Source

Choose Data File   C:\prog\CSSL\PcVatFreeBridge\Sheets\SpreadSheetExample.xls

Reload Data File

Quarter 1 | Quarter 2 | Quarter 3 | Quarter 4

Quarter 1

Box	Description	Value	Range Name	Cell ref	Status
1	VAT due on Sales	2825.60	Q1_VAT_BOX1	vatret01!$H$8	
2	VAT due from EU	0.00	Q1_VAT_BOX2	Not present	
3	Total VAT due	2825.60	Calculated	Calculated	
4	VAT Reclaimable	341.38	Q1_VAT_BOX4	vatret01!$H$13	
5	VAT to pay/claim	2484.22	Calculated	Calculated	
6	Total Sales (exc)	14128	Q1_VAT_BOX6	vatret01!$H$17	
7	Total Purchases (exc)	2179	Q1_VAT_BOX7	vatret01!$H$20	
8	Goods to EU (exc)	0	Q1_VAT_BOX8	Not present	
9	Goods from EU (exc)	0	Q1_VAT_BOX9	Not present	

Select VAT Box values   Save   Cancel
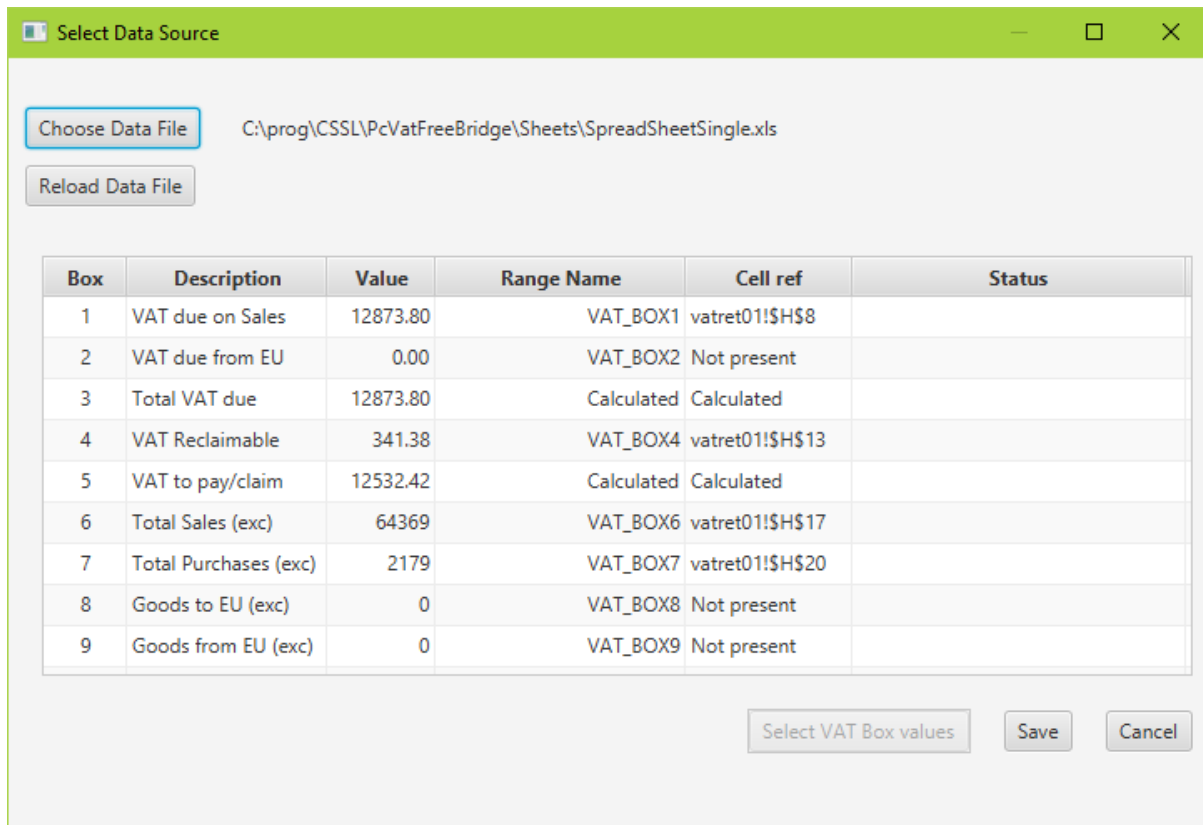
Excel Data - Single Return Naming Scheme

If you have decided to use the Single Return Naming scheme, then 100PcVatFreeBridge expects these 'named cells' to be present in your Excel spreadsheet:
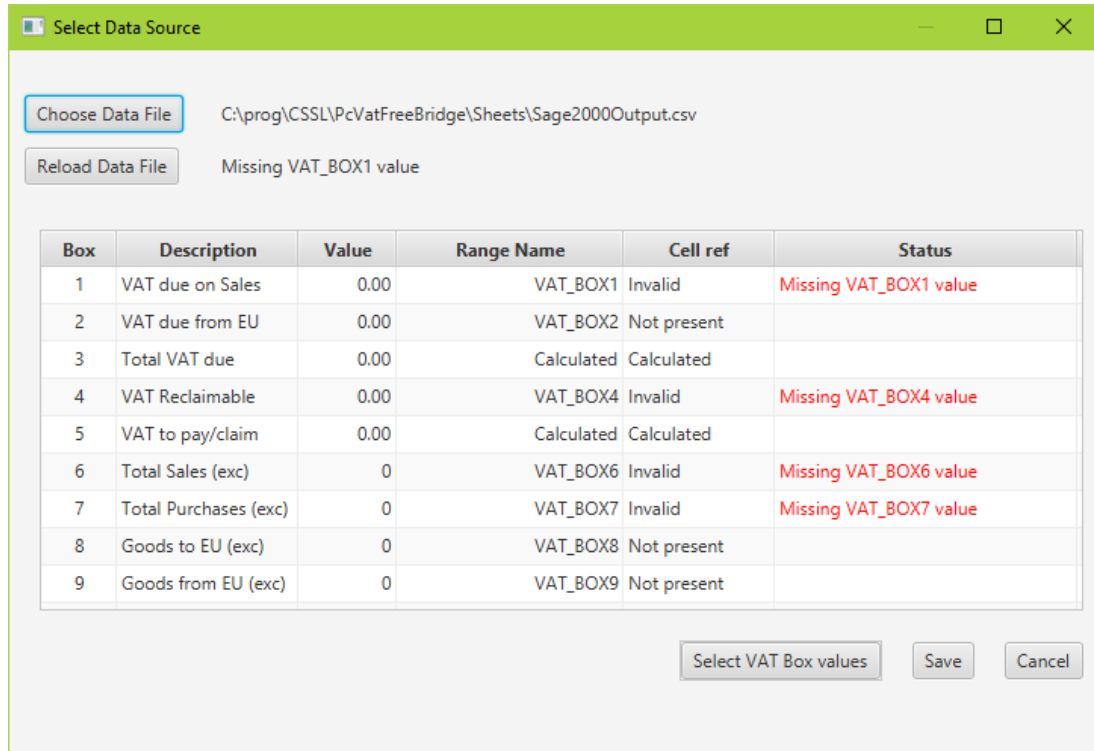VAT_BOX1
VAT_BOX4
VAT_BOX6
VAT_BOX7

CSV or Excel Data – Absolute Cell References

However, if your input is in CSV format or automatically generated from another accounts package, then you can change these default names to absolute cell references using the 100PcVatFreeBridge Select Data Source panel:


When selecting a CSV file or a spreadsheet that has no appropriate named ranges, error messages will appear in the status column and the select VAT Box Values button will be enabled. Pressing this opens up your data file to allow the Box values to be selected:
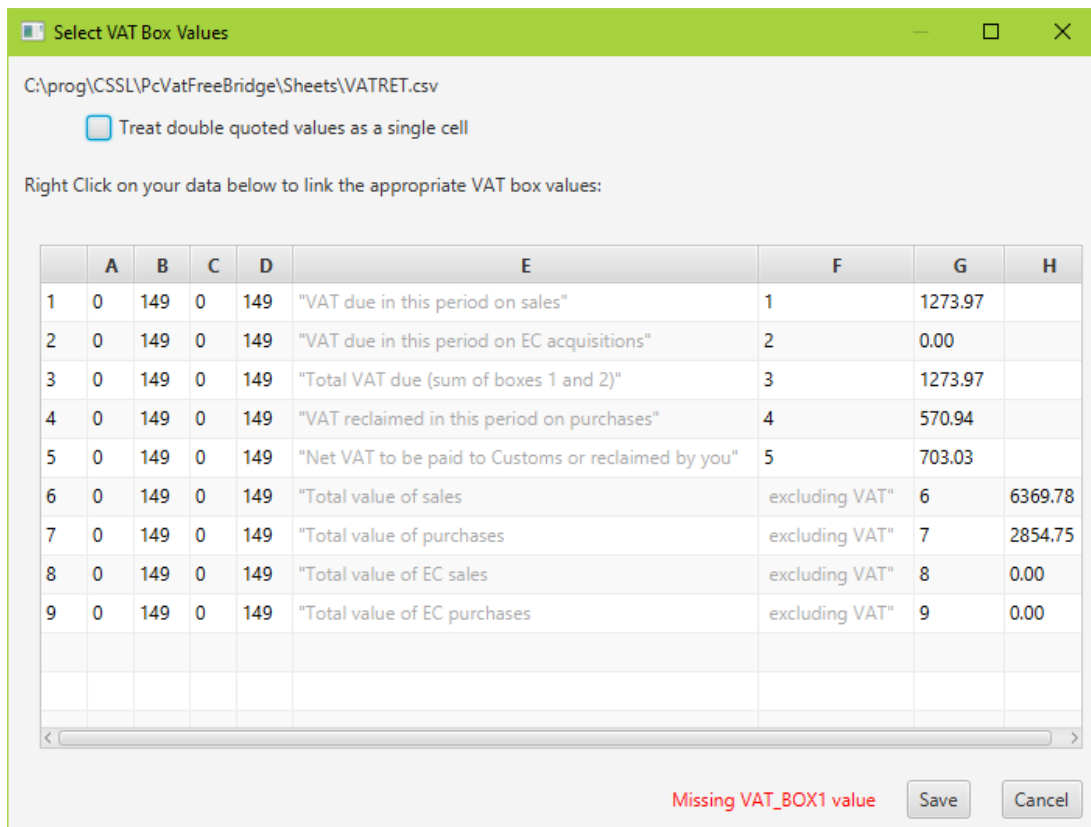
Here we have some example CSV output from the Sage accounts package. You can see that it has some commas embedded in the double quoted wording so check the "Treat double quoted text as a single cell" check box to align the data. The right click on each desired VAT box value to link it to the appropriate reference.
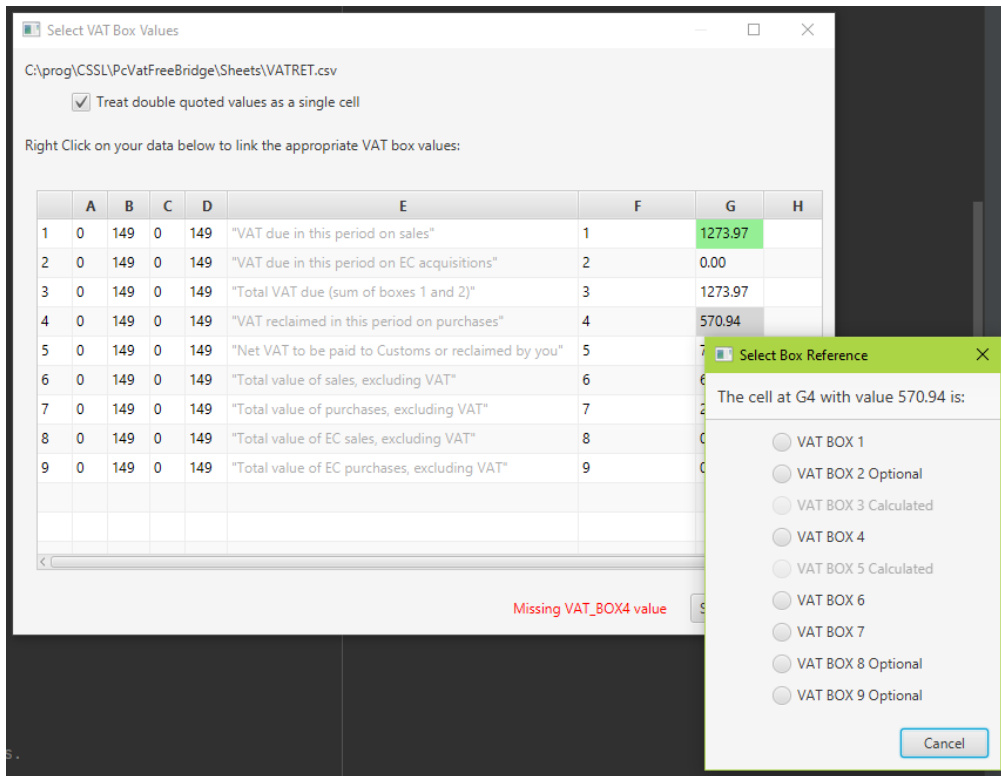
As a minimum, the VAT return requires values for Boxes 1, 4, 6 and 7. All others will be treated as 0 if unspecified:
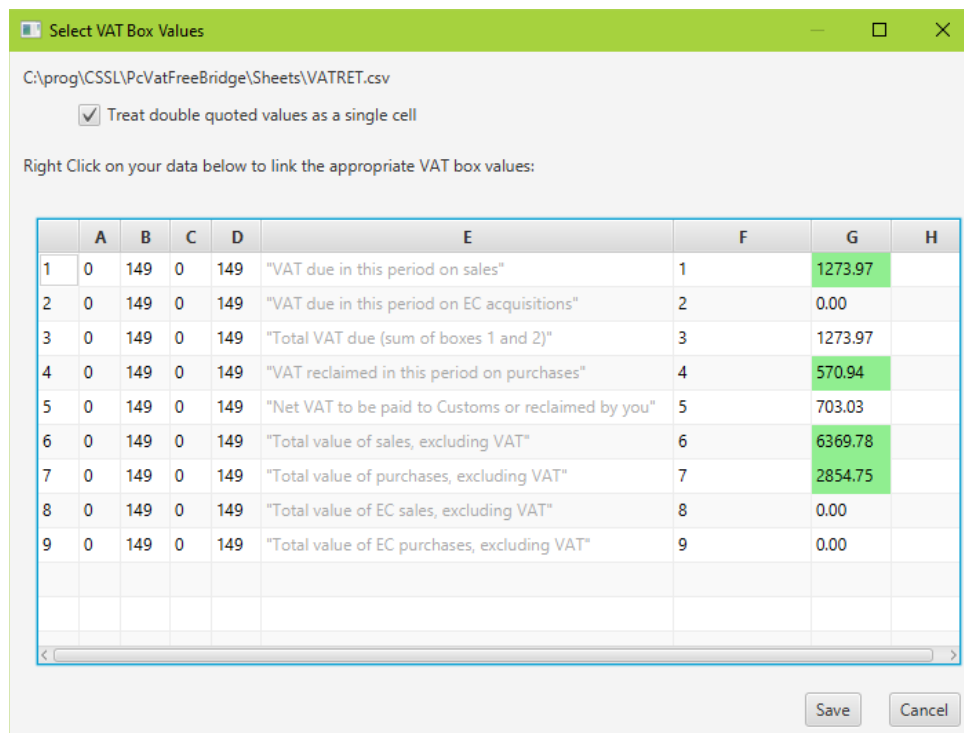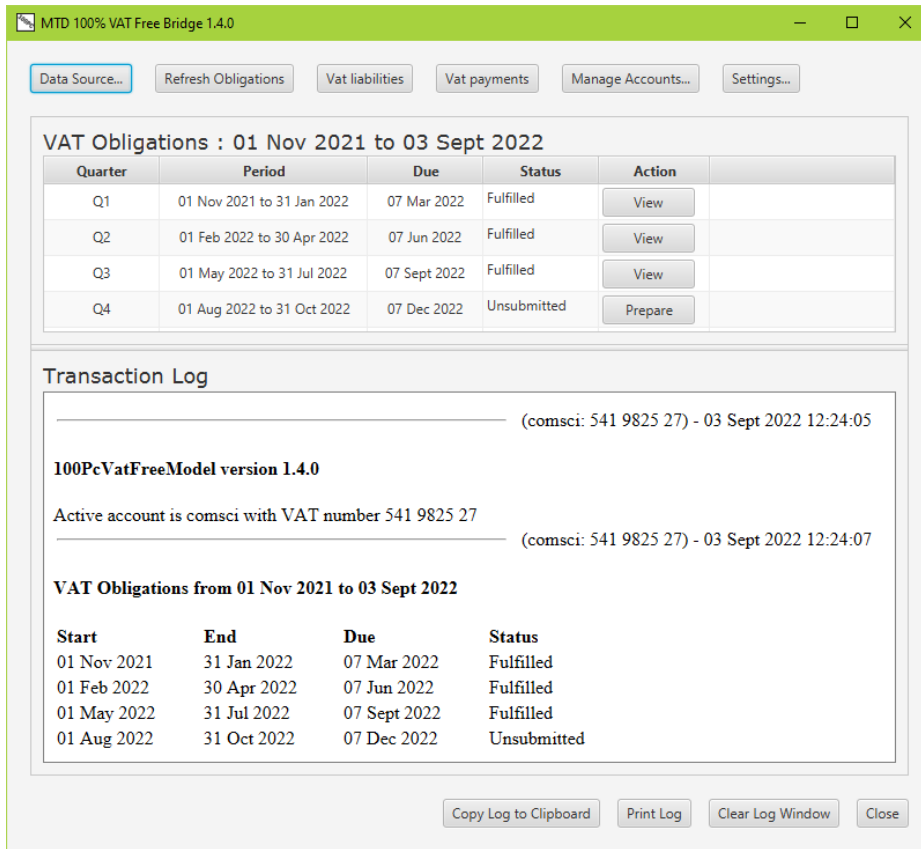

Press Save and Save again and you are now ready to prepare your return for submission.

2.2   Successful Setup and Subsequent Running.

If setup was successful, then the App should open with any VAT obligations automatically displayed:

This is also how the App will open on subsequent runs.

The top B**utton Row** provides a row of buttons that perform the actions labelled.

The **VAT Obligations Table** shows the results of querying the HMRC VAT service. The **Action** buttons allow you to view fulfilled obligations and prepare open obligations for submission. If the Prepare button is disabled it is likely because you do not have linked data for that quarter. (Or your selected VAT quarter does not match the HMRC period Check your VAT start month setting!)

The **Transaction Log Area** displays a scrolling record of your actions. Use the buttons at the bottom to copy, print or clear this log.

2.3   Submitting a VAT return

If you have an open obligation and matching valid source data, the Obligations Submit button will be enabled and will display a screen similar to:
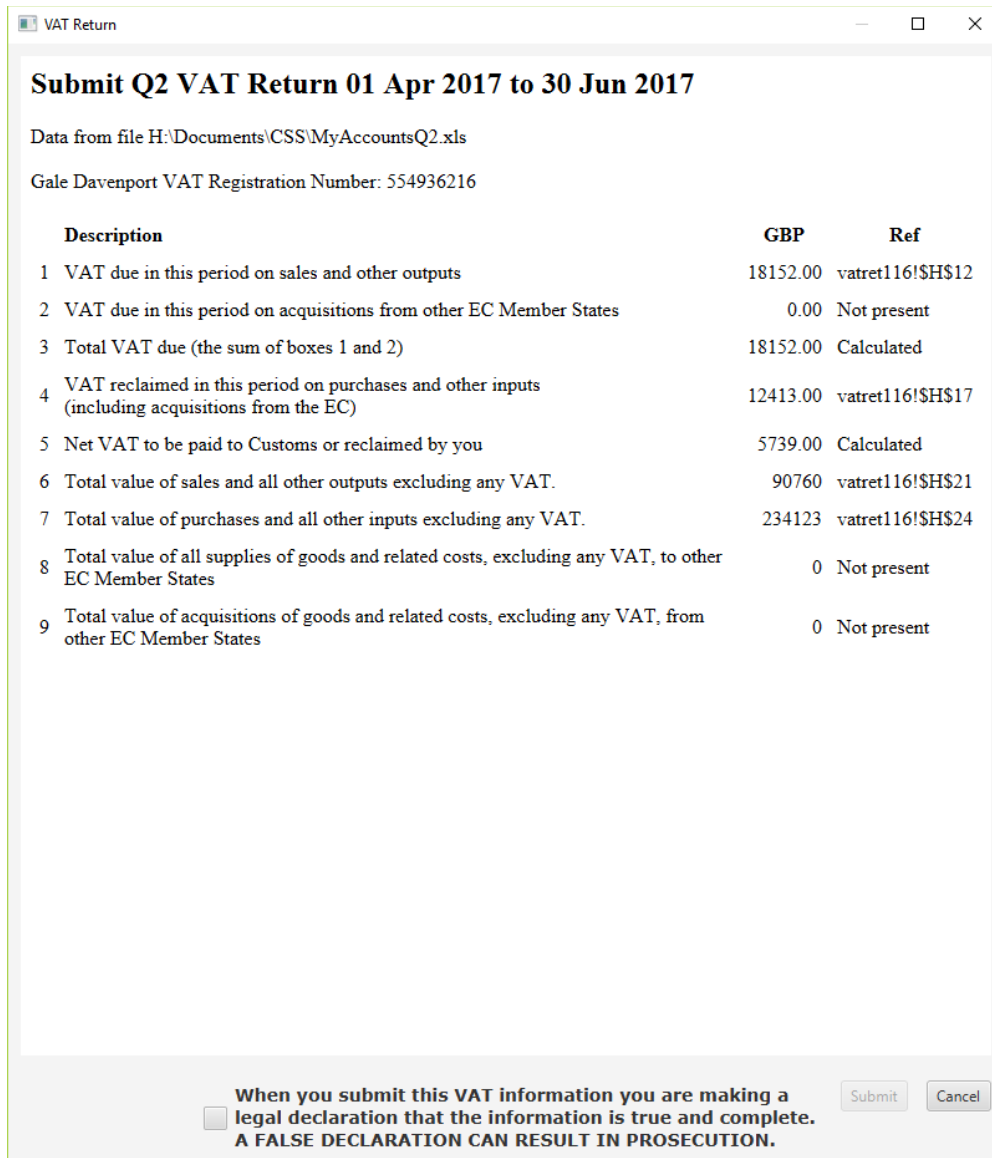
Ticking the declaration check box will open an alert box encouraging you to double check that the correct data is selected for the desired quarter. Apart from checking that mandatory data is present 100PcVatFreeBridge performs no other validation checks. It's your responsibility to ensure that the correct spreadsheet is open and the correct fields have been referenced as appropriate. 100PcVatFreeBridge will submit the VAT box figures as displayed.
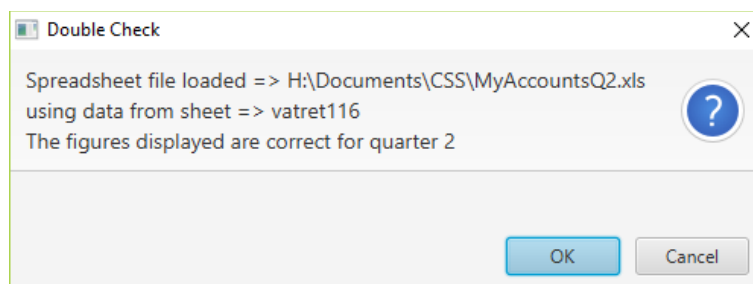
On confirming this message, the Submit button will become enabled and can be used to send your return to HMRC

If the submission is successful you will see a final display similar to:

This can be copied to the clipboard or printed out for your records. (If you want a file copy then select a PDF file printer from the printer list)

Close the dialogue and after a short while, the HMRC server should show this obligation as 'Fulfilled' and the amount due showing as a VAT liability.

2.4   Control Buttons

Data Source

Allows you to choose the appropriate data source file for your submissions for the specified year and quarter.

Refresh Obligations

Simply refreshes the displayed data from the HMRC VAT service. Note it may take a few minutes for a submitted VAT return to change from Open to Fulfilled: Be patient!

VAT liabilities

Requests and displays the VAT liabilities from the HMRC VAT service.

VAT Liabilities from 01 Jan 2017 to 31 Dec 2017

Period	Type	Original	Outstanding	Due
01 Jan 2017 to 05 Apr 2017	VAT Return Debit Charge	463872	463872	12 May 2017
01 Apr 2017 to 30 Apr 2017	VAT Return Debit Charge	15	0	09 Jun 2017
01 Aug 2017 to 31 Aug 2017	VAT CA Charge	8493.38	7493.38	07 Oct 2017
01 Oct 2017 to 01 Dec 2017	VAT OA Debit Charge	3000	2845	31 Dec 2017

VAT Payments

Requests and displays the VAT payments made from the HMRC VAT service.

Manage Accounts

If you have more than one business or client, allows you to add and delete accounts and switch between active accounts. Authorisation and data source files are all stored independently.
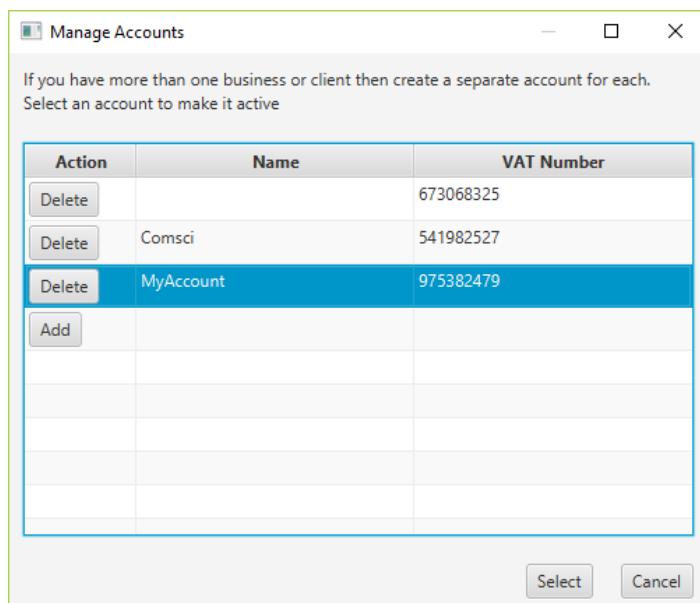
Settings

Allows you to change the account name, and start month and year of interest.

About

Displays current version and provides links to various documents and websites.
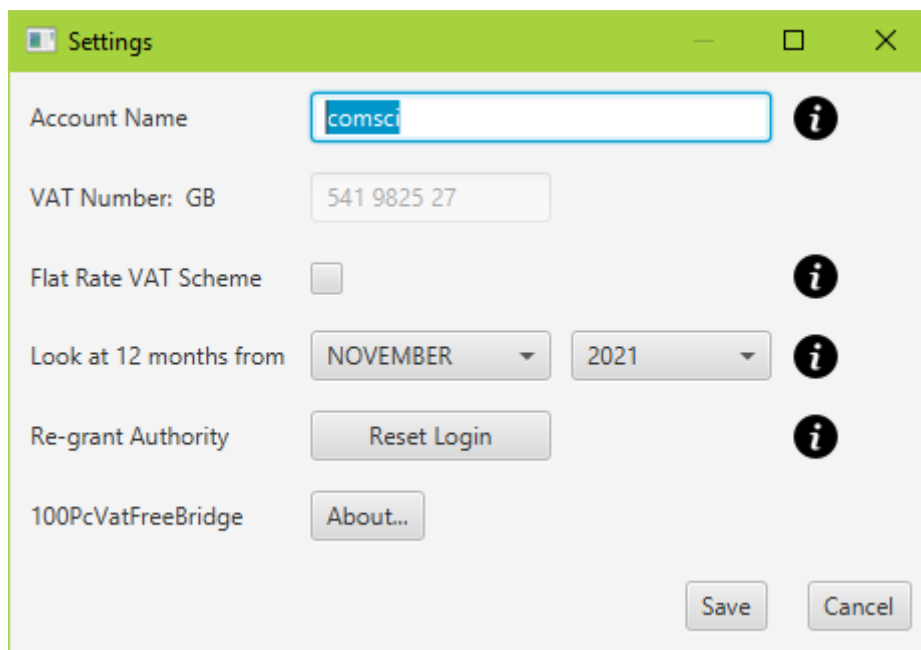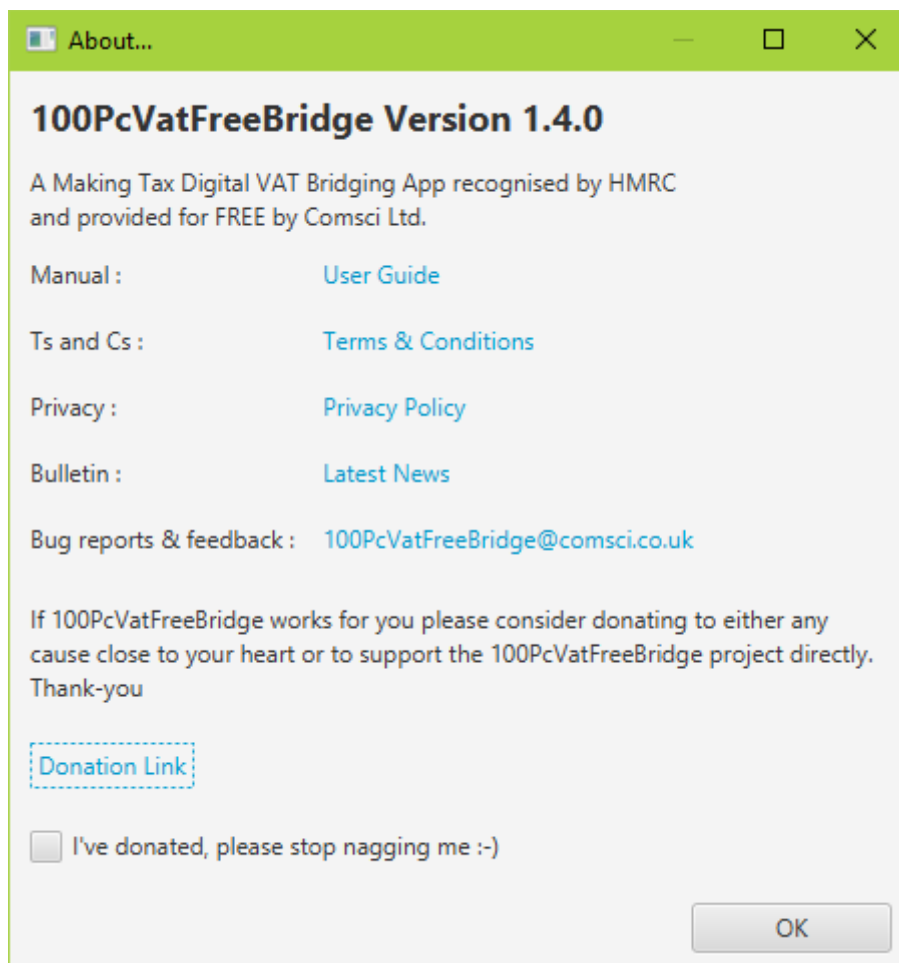
3   Troubleshooting Guide

3.1   Known Limitations.

OpenOffice .ods format not supported. However, OpenOffice can save as .xls, .xlsx or .xlsm format (Excel 97 or later).

32 bit windows is not supported.

3.2   Upgrading.

To upgrade to a later version of 100PcVatFreeBridge:

1. Download the latest version from the website,

2. Uninstall any previous version earlier than 1.2.2 (1.2.2 or later will be upgraded by the install)

3. Run the new installer

Your settings are preserved across updates, so your linked datafile and data choices will not be lost in the update.

3.3   Starting a New Year.

The App will warn on start-up if your current setting for start date plus 12 months does not include the current date. So to start a new year, simply increment the start year setting in the App. All requests will be for the 12 month period starting from this date.

If your data file contains all four quarters, the easiest way to proceed is to save your Excel data file as a new file for the new financial year. Edit your new file to delete all your source figures ready for entering your new data for the new year. That way, the formulas and named ranges (Q1_, Q2_… etc) are perpetuated and can be loaded into the App by selecting the new spreadsheet as the source file for the new year.

3.4   What if I've made a mistake?

If you accidentally submit the wrong figures, HMRC do not provide a mechanism for re-submitting the return. You will have to follow the HMRC rules for making a correction. This might be correcting the figures on the next return or filing a form VAT652 to notify HMRC about the error.

3.5   How do I save my information?

If you want to save a file copy of any information rather than a paper printout then choose a "PDF file printer" from any Print Dialog. This will allow you to save the information to a PDF file of your choice.

3.6   How do I grant **authority** to the App?

The App will ask for authority to talk to HMRC if it does not already posses this. (Authority typically lasts for 18 months or until manually revoked.) Granting authority must be done from within the App and it will guide you through the HMRC screens to do this. (See earlier section of the tutorial video). Don't be confused by the first "Continue" button that appears to be for Agents only. It's just Continue to the next screen. You can check what software has authority from this link:
https://www.gov.uk/permission-software-tax-information

3.7   Why am I seeing no obligations?
Why am I getting Status code "CLIENT_OR_AGENT_NOT_AUTHORISED"?

If you are already signed up for VAT MTD:

You can check if you are on the MTD VAT scheme by signing in to your government gateway account and checking for a 'Making Tax Digital for VAT' section listed on your Business tax summary page. Also, check that the credentials you are using to authorise the App match those listed . Login to your business account of the HMRC Government Gateway and go to "Manage Account" → "Give a team member access to a tax, duty or scheme" → "Team Members".

Sometimes the granted authority token can get out of sync with HMRC. (E.g. You have used the HMRC web interface to change the account details or authorised personnel.) There is a "Reset Login" button on the settings panel. This can be used to revoke the login token and will take you through the granting authority process again. This should fix any synchronisation issues with HMRC. Make sure the credentials entered match those listed on your HMRC business account VAT settings page as having authority to perform MTD VAT.

Are you sure you have signed up to the HMRC's MTD VAT service? This needs to be done first and is separate from granting authority to 100PcVatFreeBridge. You need to login to your HMRC account to sign up and this can take up to 72 hours to become active. You should receive an email acknowledgement from HMRC when this is complete. The best time to sign up is after your last manual VAT return has been paid and in plenty of time before your first MTD submission. Once signed up for MTD you cannot then make a manual submission.

https://www.gov.uk/guidance/sign-up-for-making-tax-digital-for-vat

You can check if you are on the MTD VAT scheme by signing in to your government gateway account and checking for a 'Making Tax Digital for VAT' section listed on your Business tax summary page.

Is the HMRC VAT service down for scheduled maintenance? Check for known problems at

https://www.gov.uk/government/publications/making-tax-digital-for-vat-service-availability-and-issues/making-tax-digital-for-vat-service-availability-and-issues

3.8   Why is my grant authority screen blank?

If the grant authority screen is blank with just a cancel button then check whether your PC clock is set at the correct time. HMRC's server will not communicate with a program where the date is not within tolerance. Does your corporation run an SSL proxy service, e.g. Symantec BlueCoat? If so ask your IT dept to resolve the issue.

3.9   Why does my spreadsheet data not load?

Most problems are caused by errors in the named cell definitions.

Have you defined the names properly (not just entered text in adjacent spreadsheet cells)?

Make sure the Q*n*_VAT_BOX*n* defined names use underscore '_' rather than hyphen '-' in the names.

Make sure you have used capital letter O rather than number zero 0 when spelling BOX. One user was left struggling for hours on this!

Make sure each name refers to one cell only and the cell is numeric (or a numeric formula)

Try loading the example spreadsheet (appropriate for your choice of single return or all quarters) available on the website and check for differences.

Use the Formula → NameManager in Excel to check all the names you have defined.

3.10   I can't change my datafile setting

Upgrade to version 1.2.1 or later

3.11   How can copy to a new computer or reset all settings?

All the configuration settings are stored in the AppData directory: typically:

C:\Users*YourName*\\AppData\Roaming\100PcVatFreeBridge\…

(For Macs it's /Users/YourName/Library/Application Support/100PcVatFreeBridge/...)

To change computers, simply copy this directory tree to the similar position on your new PC and install the latest version of the App.

To reset all settings simply delete this directory and contents

Note that this will factory reset the application and lose all stored settings. (VAT numbers, authorisation tokens, VAT start month and year of interest. It will not affect any data already submitted to HMRC or your spreadsheets.

3.12   What Ports and URLs does the App Use?

Your IT department may need this information to configure firewalls and or Internet Proxies:

https://api.service.hmrc.gov.uk : To access the HMRC endpoints

https://app.comsci.co.uk : To check for updates and HMRC service status

http://localhost:8084/redirect : As part of the OAuth2 authentication
process

TLS1.2 or higher (enabled in the App) is required to access HMRC endpoints and the connection must be direct. I.e. An https proxy server will appear to the App as a 'man in the middle' attack. There is currently no provision in the App for adding extra security certificates to allow such a setup.

3.13   How do I submit an error report?

Please detail what version you are using (upgrade to the latest if not already) and what operating system you are running. Include details of the problem with screenshots and log information data files if required. The log file can be found in the directory:

C:\Users*YourName*\AppData\Roaming\100PcVatFreeBridge\…

(For Macs it's /Users/YourName/Library/Application Support/100PcVatFreeBridge/…)

(For Linux it's ~./.100PcVatFreeBridge/…)

Email the information to 100PcVatFreeBridge@comsci.co.uk