

**LOG40M**  
**Amateur Radio Software**

By  
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**User Guide**

By  
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## Contents

<b>Welcome to LOG4OM.....</b>	<b>7</b>
<b>Main Features .....</b>	<b>8</b>
<b>Getting Started.....</b>	<b>9</b>
<b>Initial Setup of Log4OM: .....</b>	<b>9</b>
Initial setup steps .....	9
Selected Config.....	9
Station Info.....	10
Explanation of Callsign fields. ....	11
Settings.....	12
Auto Update interval .....	13
Automatically Starting External Software.....	13
Cat & Cluster .....	14
QSL and Labels .....	15
External Logs .....	16
eQSL 'QTH Nickname' .....	17
Voice Keyer.....	17
Voice Keyer & PTT controls.....	18
Services .....	19
<b>Communicator.....</b>	<b>20</b>
Administrator Privileges.....	20
Setting up Communicator .....	22
Inbound - Messages .....	22
PST Rotator Support.....	23
Webcam .....	24
<b>Radio connection .....</b>	<b>25</b>
Hamlib control:.....	26
OmniRig control: .....	26
SO2R (Beta) and dual radios.....	27
<b>Starting a New logbook! .....</b>	<b>28</b>
New Database .....	28
Importing an ADIF file .....	29
<b>Setting up multiple profiles.....</b>	<b>31</b>
How to set up multiple profile configurations .....	31
<b>Editing User files .....</b>	<b>35</b>
<b>Call Sign Lookup.....</b>	<b>37</b>
<b>Main Screen .....</b>	<b>39</b>
<b>Keyboard Operation .....</b>	<b>39</b>
Frequency number convention. ....	39
Keys .....	40
Function Keys .....	40
Windows keyboard shortcut keys .....	44
<b>QSO entry .....</b>	<b>44</b>

Quickly adding a DX Spot .....	44
Mode Lock.....	45
Time Management .....	45
Time summary .....	46
Call Lookup .....	47
QSO Information (F1) .....	48
Country & IOTA - SOTA (F2).....	48
Club and Awards (F3) .....	49
Contest info (F4).....	49
Extended info & QSL (F5) .....	49
Power .....	50
Sat/Split Mode (F6) .....	50
<b>QSO Information (F7).....</b>	<b>51</b>
Worked Before .....	51
World Map .....	51
Country/Band Worked before grid .....	51
Beam Heading and information .....	52
Cluster display .....	52
<b>Recent QSOs (F8) .....</b>	<b>52</b>
Column Layout – Titles - Width .....	52
Editing an existing QSO .....	53
Searching the ‘Recent QSO’ (F8) window.....	54
Search Parameters (Filters).....	54
Adding search parameters.....	55
Saved searches.....	56
<b>Cluster (F9) .....</b>	<b>57</b>
Cluster colours.....	57
Worked/confirmed filtering.....	57
Filter ‘By country’ .....	58
Filter ‘By QSL received’ .....	58
Call sign highlighting.....	58
Time Highlighting .....	59
Unworked mode on spot band .....	59
Custom filters .....	60
Most wanted DXCC .....	61
Extended View .....	61
<b>Alerts.....</b>	<b>63</b>
Introduction. ....	63
Types of Alert .....	65
Setting up Log4OM alerts.....	66
Configuring Alerts.....	67
Alerts for wanted Countries or Confirmation.....	69
Alerts for IOTA.....	70
Alerts Miscellaneous .....	70
Testing Alerts.....	71

Using the free Growl for Windows.....	71
<b>Cluster Scanner (F10) .....</b>	<b>73</b>
<b>Browser (F11) .....</b>	<b>73</b>
<b>Menu Bar and Icon Bar .....</b>	<b>74</b>
<b>File.....</b>	<b>74</b>
New Database .....	74
Open Database.....	75
Export ADIF.....	75
Export CSV .....	76
Import ADIF .....	76
<b>QSO Manager .....</b>	<b>77</b>
Bulk Editing.....	77
Log Checks.....	80
Custom Update query .....	81
Log book Printing .....	82
Using the 'Print' facility.....	82
Using the 'To CSV' facility' to print the logbook .....	84
Plotting grid squares to Google Earth .....	<b>87</b>
<b>QSL Tools .....</b>	<b>89</b>
QSL Management.....	<b>89</b>
Processing Paper QSL's in Log4OM .....	90
QSL Processing – Reactive method .....	90
Process Outgoing QSLs - General .....	90
Export an ADIF or CSV.....	91
Merge ADIF .....	91
EQSL & LOTW UPLOAD AND DOWNLOAD .....	93
Bulk EQSL & LOTW upload.....	93
LOTW Upload.....	95
HRDLog and Clublog .....	96
Label print.....	<b>97</b>
QSL Assistant.....	<b>100</b>
Contact Information .....	102
Label Design .....	103
<b>Utilities .....</b>	<b>104</b>
Cluster .....	<b>104</b>
Map – F1 .....	104
Cluster – F2 .....	105
Connection – F3 .....	106
Cluster - Integration with HRDLog .....	108
Log4OM Super Cluster .....	<b>109</b>
Super Cluster – F2 .....	109
World Map - F1 .....	110
Statistics & Awards.....	<b>111</b>
QSL route to an award .....	112
Statistics awards tab. ....	113
QSO to DXCC Award .....	114

Country Statistics: .....	115
The Country Grid .....	117
About ARRL DXCC awards: .....	119
To change 'Submitted' to 'Verified' .....	120
What happens if LOTW is also used? .....	121
Selecting QSOs for award submission.....	122
Award Granted .....	122
Updating Award Credit Status .....	123
DXCC Challenge Award .....	125
Challenge Award display:.....	125
Challenge Award Total Score: .....	126
WAS (Worked all States) Award .....	126
WAS Missing or incorrect state information.....	127
<b>Awards Manager .....</b>	<b>127</b>
Award construction.....	127
"Header" Characteristics.....	128
"Data" (References) Characteristics: .....	129
Defining an award:.....	131
In action.....	132
<b>SOTA (Summits on the air) Support.....</b>	<b>134</b>
Recording a SOTA reference .....	134
SOTA Award statistics.....	135
Uploading a CSV file to SOTA .....	135
Downloading a "My Results" CSV file from SOTA .....	136
Keeping the SOTA references current.....	137
Viewing detailed summit details and maps .....	137
<b>Net Control .....</b>	<b>138</b>
Adding nets and members.....	139
Announcing nets on line with HRDLog.net .....	140
Call sign Management .....	141
<b>Settings .....</b>	<b>143</b>
IOTA database .....	143
Country Database.....	144
Clublog Database.....	144
Special Call List (SCL) .....	144
LOTW database .....	145
Awards Database.....	146
Auto Update .....	146
Alerts .....	146
<b>Winkeyer .....</b>	<b>147</b>
<b>Miscellaneous .....</b>	<b>152</b>
Synchronize logbooks using Dropbox.....	152
Transferring a database and configuration to another PC.....	154
Gathering data from the original installation .....	154
Recording, sorting and listing portable operations.....	157

<b>Integration with other software .....</b>	<b>161</b>
Starting the external services facility .....	161
Rotator Control .....	162
PSTRotator set up.....	162
<b>VE7CC – CC User Program .....</b>	<b>164</b>
<b>AR Cluster Client.....</b>	<b>165</b>
<b>Virtual Serial Ports explained .....</b>	<b>167</b>
<b>JT65-HF &amp; JT Alert Integration.....</b>	<b>172</b>
Inbound messages by UDP .....	173
<b>Digital Master 780 integration .....</b>	<b>174</b>
How to use DM780 .....	176
<b>FLDigi Integration .....</b>	<b>177</b>
<b>SDR-Radio Integration .....</b>	<b>180</b>
<b>Installing a MySQL Database .....</b>	<b>182</b>
How to create a Model.....	189
Setting up a LOG4OM MySQL database .....	191
Importing an ADIF file into the new MySQL database .....	194
MySQL Fast backup & restore .....	196
<b>Running Log4OM from a memory stick .....</b>	<b>198</b>
<b>Flex Radio setup .....</b>	<b>200</b>
<b>Using PowerSDR/IF Stage with LOG4OM and other programs.....</b>	<b>202</b>
<b>FlexRadio Signature Series (6500 and 6700) - Integration.....</b>	<b>208</b>
<b>END-USER LICENSE AGREEMENT FOR THIS SOFTWARE .....</b>	<b>210</b>

## **Welcome to LOG4OM**

Log4OM is free software developed by Daniel Pistollato IW3HMH for the complete management of the station log. The application is developed in C # and is compiled for any Windows operating system, XP and above (Vista, Windows 7 & 8 +++)

The software will only run on Linux machines using the "Wine" Windows emulator or Mac OS X machines using "Parallels" emulation software or using "Boot Camp" The Log4om team do not provide support for the program when its being run on Linux or Mac machines.

Log4OM is designed to be easy to understand, as well as easy to adapt, to the requirements of the individual. QSOs are personal and so no constraints have been made to prevent the user from accessing QSOs (Including by direct access to whatever database source is used).

Each set, list or database of the program is stored in text files or XML (with the exception of the configuration file which for security is saved in binary encoding with a BASIC 64). The information is saved in the configuration files and can be recovered by using a special button on the settings screen.

This approach allows the user to modify the list of contests, operating modes, bands, band plans, views of the QSO and all other available information. This information is freely accessible and usable by other programs, and can be updated independently by the user if required.

The database used for storing the QSO is SQLite, which is open Source. Free tools are available to read and write data in the database on the Internet.

The more advanced users may wish to use the MySQL support included in the program, which makes a networked logbook for multiple stations possible.

The software is freely downloadable at <http://www.pisto.it> and its use is free of charge and available for any purpose.

Log4OM is constantly evolving and new versions with new features are being released regularly. The author endeavours to maintain compatibility with previous versions of the database. However, before performing an update, it is important to make a backup copy of the data because the publisher takes no responsibility for lost data.

While the author attempts to avoid problems and errors it is imperative (valid for any program) that the user makes regular backups of data either manually or with the special functions provided in the program.

## **Main Features**

- Runs on Windows XP, VISTA, Win 7 x86 and Win 7 x64 operating systems.
- Integrated with ClubLog, HRDLog.net, HamQTH & QRZ.com.
- Radio CAT control with either Hamlib or OmniRig.
- Cluster Scanner function displaying adjacent stations.
- Cluster Alerts to screen, email or by Push to mobile phones
- Integrated with SDR-Radio Consul software by Simon Brown G4ELI
- Full SOTA support.
- Integration with HRDLog for automatic upload of QSOs and status notification 'ON AIR'.
- Complete QSO search facilities.
- Net Control.
- SO2R (Beta)
- Export to ADIF, CSV and PDF either the complete log or part of the log.
- Automatic eQSL, LOTW, HamQTH, Clublog and HRDLog upload and download.
- Multiple configurations (Profiles) for different locations and calls.
- Advanced cluster filters for Country, mode, band, spotter, IOTA, SOTA etc.
- Configurable cluster alerts by email, audio, visual and messaging
- Integration with HRDLog propagation and display graphics.
- Automatic display of LOTW users in cluster display.
- Special call List, ClubLog call exceptions, Country, IOTA and LOTW user files updates.
- Comprehensive QSO status by DXCC entity/Band/mode for each QSL (QSL cards, eQSL, LOTW).
- Full QSL management of the QSO data available with different methods of delivery of the most appropriate QSL, including merging of QSO data.
- Support for the inclusion of historic QSO data, either automatically or by manual insertion.
- Super Cluster derived from HRDLog.com.
- Label Printing.
- Integration with external software such as DM780 and FLdigi (MixW to come) for digital modes, Hamlib or OmniRig for rig control and PSTRotator for fully automatic rotator control.
- Real time grey line presentation.
- Webcam support and upload to HRDLog.net.

### **Support**

Support for Log4Om is supplied free from the author

at

**<http://www.pisto.it/forum/>**



## Getting Started

### Initial Setup of Log4OM:

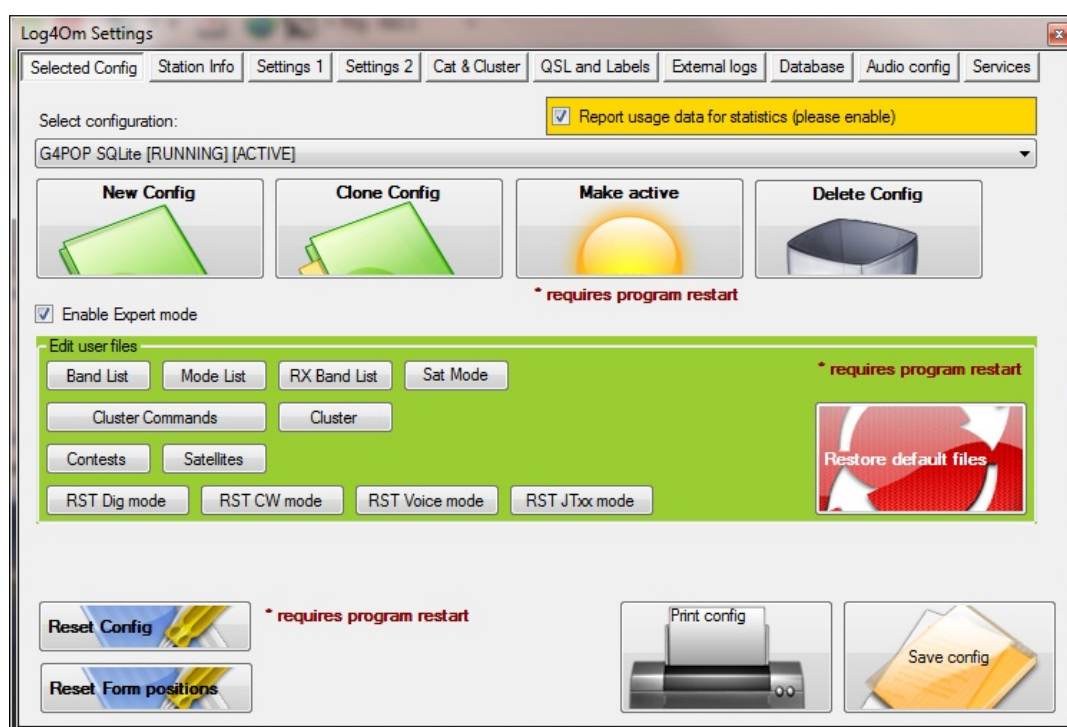
#### Initial setup steps

1. Fill in **ALL** of the “Options/Station Info tab” information fields.
2. Complete whichever of the other “Options” tabs are applicable
3. Ensure that a database is created by following the instruction in this user guide “STARTING A NEW LOGBOOK”

**Unless steps 1 and 3 above are completed it is not possible to use LOG4OM**

#### Selected Config

After installing the program, launch the program. The first screen will be the settings screen. Click on the ‘Selected Config’ tab and ensure that the information required for each tab is complete, in order for the program to operate and maintain the data correctly.



On first use of the program, the selected configuration will show ‘New Configuration (Active)’. To change the configuration name in the next tab, click on the ‘Station Info’s’ tab.

## Station Info

The “Profile description” will initially show ‘*New Configuration*’. This can be changed as desired, perhaps to the user’s call sign or a special event title.

The screenshot shows the 'Station Info' tab in the Log4Om Settings application. The interface is organized into two columns of fields. The left column contains fields for Profile description (Test setup), Station Callsign (G4POP), My Locator (JP01JP), Operator Callsign (G4POP), Country (England), EU ITU (27), CQ (14), IOTA Group, IOTA Island, IARU Region (1), My USA-CA Counties, and My VUCC Grids. The right column contains fields for Owner Callsign (G4POP), Operator name (Terry Genes), My Street (28 Hillside Road), My City (Bumham on Crouch), My Postal Code (CM0 8EY), My Rig (Icom IC756 ProIII), My Sig, My Sig info, Tx Power (0.000), Antenna (\*), My Fists, and My SOTA. A yellow banner at the bottom indicates that the 'Reset Config' and 'Reset Form positions' buttons require a program restart. A checkbox for 'Report usage data for statistics' is checked. There are also icons for 'Print config' and a floppy disk icon.

Field	Value
Profile description	Test setup
Station Callsign	G4POP
My Locator	JP01JP
Operator Callsign	G4POP
Country	England
EU ITU	27
CQ	14
IOTA Group	
IOTA Island	
IARU Region	1
My USA-CA Counties	
My VUCC Grids	
Owner Callsign	G4POP
Operator name	Terry Genes
My Street	28 Hillside Road
My City	Bumham on Crouch
My Postal Code	CM0 8EY
My Rig	Icom IC756 ProIII
My Sig	
My Sig info	
Tx Power	0.000
Antenna (*)	140ft Doublet
My Fists	
My SOTA	

Enter the appropriate data, including the station’s call sign, (mandatory) plus any other relevant information.

### *Explanation of Callsign fields.*

The ADIF system provides support for multiple callsign's which define the exact details of the station, operator and owner:

**STATION CALLSIGN**, this is the CALLSIGN USED OVER THE AIR.

e.g. A special event callsign being used to mark a special occasion - G100RSGB

**OPERATOR CALLSIGN** this is the CALLSIGN OF THE PERSON OPERATING THE STATION.

e.g. The station Callsign is G100RSGB but the OM at the microphone is IW3HMH

**OWNER CALLSIGN** is the CALLSIGN OF THE OWNER OF THE STATION

e.g. The callsign of the person that actually owns the radio equipment and building at which the equipment (Station) is located - Perhaps G4POP in the UK. (This is rarely used and it's not exposed in the edit screens as a dedicated field)

### *A possible scenario using the above field names and example callsign's.*

**STATION CALLSIGN:** *G100RSGB (Special event station celebrating 100 years of the Radio Society of Great Britain)*

**OPERATOR CALLSIGN:** *IW3HMH (The callsign of the operator that is using the station callsign being transmitted)*

**OWNER CALLSIGN:** *G4POP (Transmitting from the radio shack of G4POP which is located in the UK)*

**MAKE SURE THE CORRECT COUNTRY IS SELECTED, OTHERWISE THERE WILL BE ERRORS IN THE LOGBOOK.**

## Settings

Enter the lookup source being used in the External sources area, i.e. HamQTH.com or QRZ.com, plus the user name and password for each.

The screenshot shows the 'Log4Om Settings' dialog box with the 'Settings 1' tab selected. The 'External sources' section has 'Use QRZ.COM' selected, with 'User' set to 'G4POP' and 'Password' masked with asterisks. The 'Lookup external sources' section has several checkboxes checked: 'Use clublog exception information', 'use Special Callsign information', 'Fill data using previous QSO', 'Realtime Lookup (Deselect for checking on TAB)', and 'Realtime previous QSO while typing (SLOW)'. Other visible settings include 'Image settings' (Blue Marble), 'Program configs' (Language: en-US), and 'Backup folder' (C:\Users\Terry\Dropbox\LOG4OM\Backups).

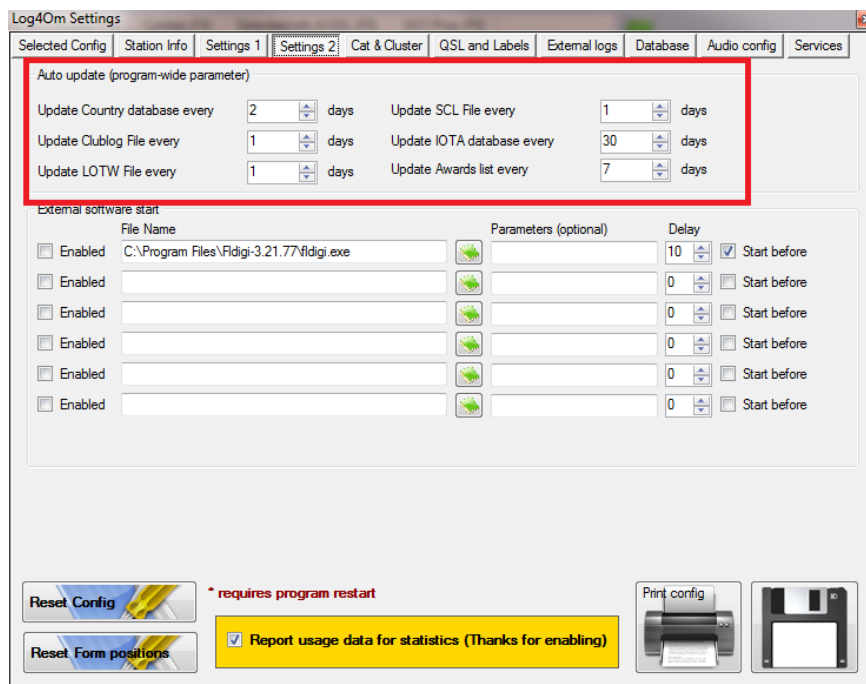
When searching for more information about a call sign, select the external and internal data sources to use, by checking the appropriate boxes in the 'Lookup External Sources' area of the services screen.

The QRZ lookup will not function properly if the user does not have a **paid subscription** to QRZ for XML downloads, however some data will be returned from QRZ if the user is just a "Ham" member of QRZ but it will be missing some very important data like zones and Grid Square.

HamQTH is free and only requires registration for full data download

## Auto Update interval

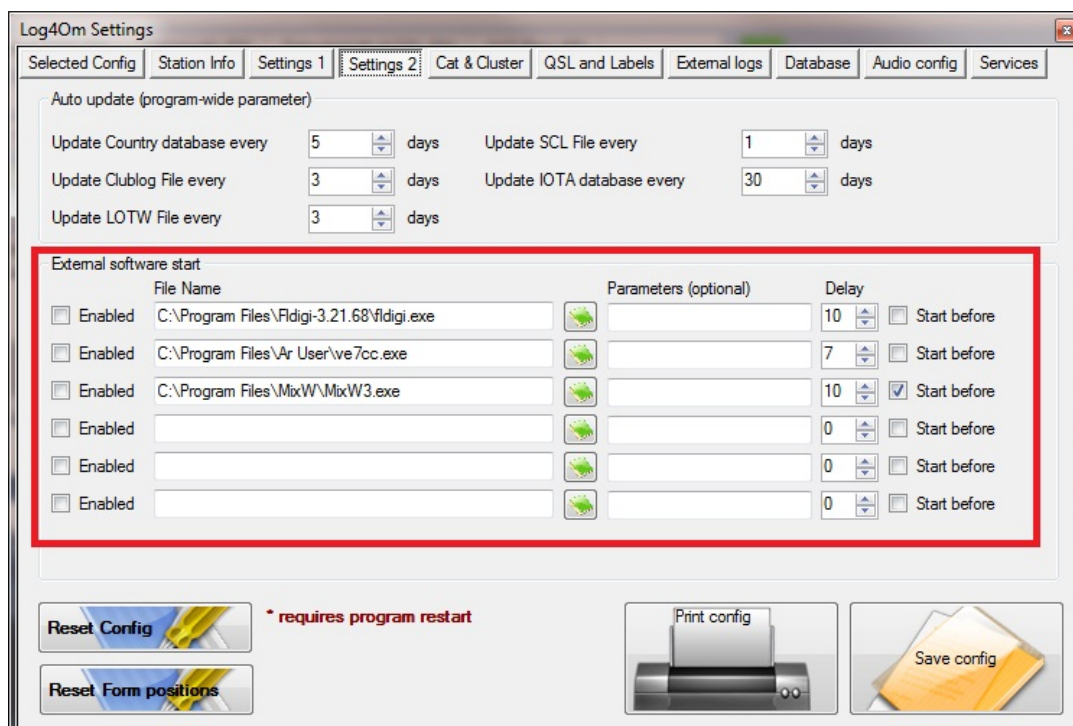
The frequency of automatic updates can be set in the 'Settings 2' tab



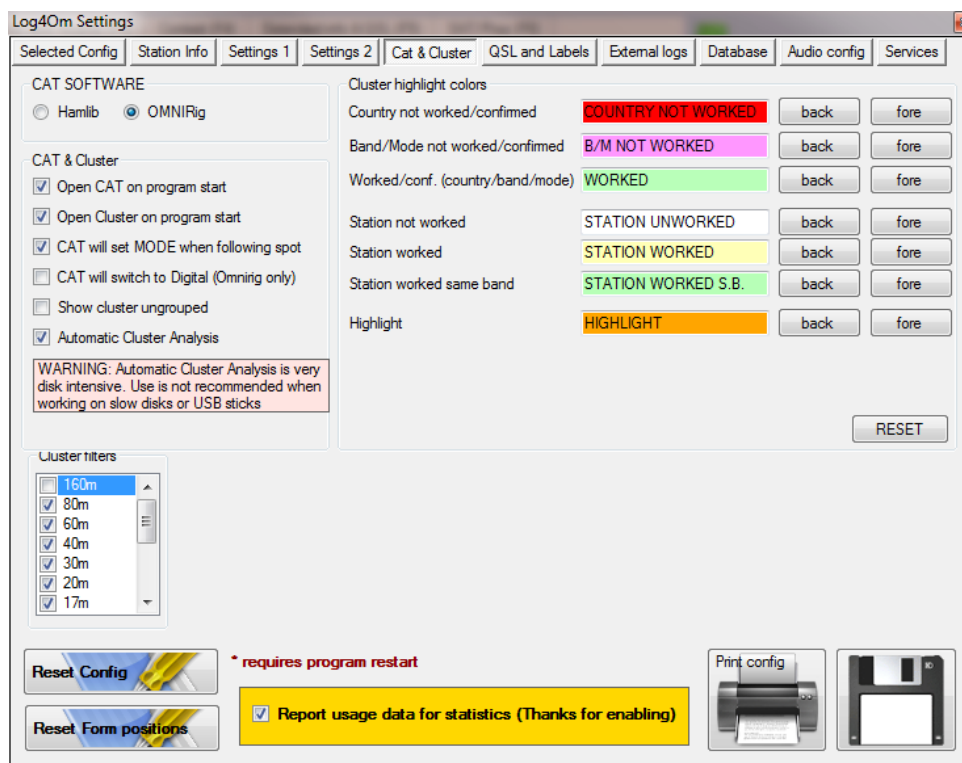
## Automatically Starting External Software

Other programs can be started automatically by entering the path to the desired programs .exe file and checking the 'Enable' box.

Such programs can be opened either before or after Log4OM starts by setting the delay time (In seconds) alongside the selected program.



## Cat & Cluster



If rig connection is desired, select, in the CAT SOFTWARE section, either Hamlib or Omnirig.

*The Omnirig program must be downloaded and installed before selecting it in LOG4OM from <http://www.dxatlas.com/OmniRig/>*

**Note:** Omnirig has proven to be the most stable of the choices.

In the 'CAT & Cluster' area make the desired selections.

## QSL and Labels

The screenshot shows the 'Log4Om Settings' dialog box with the 'QSL and Labels' tab selected. The interface is divided into several sections:

- QSL Defaults:** Contains dropdown menus for 'QSL Sent', 'QSL Received', 'LOTW Sent', 'LOTW Received', 'EQSL Sent', and 'EQSL Received', all set to 'N - no'. A 'QSL Sent via' dropdown is set to 'B - BUREAU'. There is a text field for 'QSL message'.
- Label print:** A section with the text 'Set PSE QSL when QSL RECEIVED STATUS is' and three radio button options: 'REQUESTED', 'NO', and 'REQUESTED OR NO' (which is selected).
- QSL Alerts:** A list of checkboxes:
  - Alert for required QSL
  - Alert for required EQSL
  - Alert for required LOTW
  - Show alerts also for unworked BANDS
  - Show LOTW user
- Statistic filters:** A list of frequency bands with checkboxes:
  - 160m
  - 80m
  - 60m
  - 40m
  - 30m
  - 20m
  - 17m

At the bottom of the dialog, there are buttons for 'Reset Config' (with a red asterisk and the text '\* requires program restart'), 'Reset Form positions', 'Print config' (with a printer icon), and 'Save config' (with a floppy disk icon).

Enter the desired defaults for each QSL type.

Select the desired QSL alerts.

Deselect any unwanted bands from the Cluster Filters.

## External Logs

The screenshot shows the 'Log4Om Settings' window with the 'External logs' tab selected. The settings are organized into several sections:

- EQSL Settings:** User ID: g4pop, Password: [redacted], QTH Nickname: g4pop.  Automatic upload on new QSO.
- HRDLog.net Settings:** User ID: G4POP, Upload code: f66b378865.  Automatic upload on new QSO,  Automatic HRDLog ON AIR.
- ClubLog Settings:** E-mail: tmgenes@btinternet.com, Password: [redacted], Callsign: G4POP.  Automatic upload on new QSO.
- LOTW Settings:** User ID: G4POP, Station ID: Home, Password: [redacted], TQSL Private pass: [redacted]. Executable path: C:\Program Files\TrustedQSL\tqsl.exe, Temporary path: C:\Users\Tery\AppData\Roaming\LogOM\LOTW, My call (opt): [redacted].
- HamQTH Settings:** User ID: G4POP, Password: [redacted], Callsign: G4POP.  Automatic upload on new QSO.
- QRZ.com Settings:** API Key: 9F9F-A92A-E0CB-4A0F.  Automatic upload on new QSO.

At the bottom of the window, there are several controls:

- Buttons: 'Reset Config' and 'Reset Form positions'.
- A red asterisk icon with the text '\* requires program restart'.
- A yellow box containing a checked checkbox and the text 'Report usage data for statistics (Thanks for enabling)'.
- Buttons: 'Print config' and a floppy disk icon.

**Note:** Select a folder/file path for the LOTW operation. Create a LOTW files folder for this purpose anywhere.

### User registration

The user must have registered for eQSL, HRDLog.net, Clublog, HamQTH, QRZ.com and have LOTW Trusted QSL version 1.13 or later installed for these automatic uploads to function.

### QRZ.Com Settings

Automatic upload of QSO's to QRZ Logbook requires an API code which can be obtained by logging into the QRZ website in an Internet browser. Select "My Logbook" and then "Settings" the API code is shown at the bottom of the "Logbook info" box on the left hand side.



### eQSL 'QTH Nickname'

Multiple profiles are supported by eqsl, you must provide one of these profile parameters in the Log4OM eQSL Settings field.

To find the eQSL Nickname go to the eQSL website and open your user profile, the 'QTH Nickname' is displayed in the 'Station QTH' area.

In the illustration below it is 'Home' enter the same value into the Log4OM eQSL Settings field.

(Make sure you SAVE CHANGES, or this menu will not remain after you log off!)

Language Preference:  (Many pages have been translated into various languages!)

**Station QTH Information**

**QTH Nickname**  [What is this?](#)

Primary Account?  Check this box if you want this account to be pre-selected at Login time (Only ONE of your attached accounts can be the Primary)

Callsign/QTH Start Date

January 1 1999

Time: 0 : 0 [What is this?](#)

December 31 2030

### Voice Keyer

Log4OM provides a voice keyer facility with six recordable memories.

To set up the voice keyer and record voice keyer messages open the Log4OM settings window and select the 'Audio Config' tab.

Log4Om Settings

Selected Config | Station Info | Settings 1 | Settings 2 | Cat & Cluster | QSL and Labels | External logs | Database | Audio config | Services

From Radio (Microphone)

To Radio (Speaker)

Call recording

Recording device  **Select record and playback devices**

Listening device

Click to playback recording

File 1	CQ	<input type="button" value="Record"/>	<input type="button" value="Playback"/>
File 2	CQ DX	<input type="button" value="Record"/>	<input type="button" value="Playback"/>
File 3	QRZ QRZ	<input type="button" value="Record"/>	<input type="button" value="Playback"/>
File 4	GW0SYN	<input type="button" value="Record"/>	<input type="button" value="Playback"/>
File 5	CQ TEST CQ TEST	<input type="button" value="Record"/>	<input type="button" value="Playback"/>
File 6	Net Control	<input type="button" value="Record"/>	<input type="button" value="Playback"/>

**Hold down Red button to record - Release to stop recording**

Once the settings are selected and the recordings completed click 'Save Config'

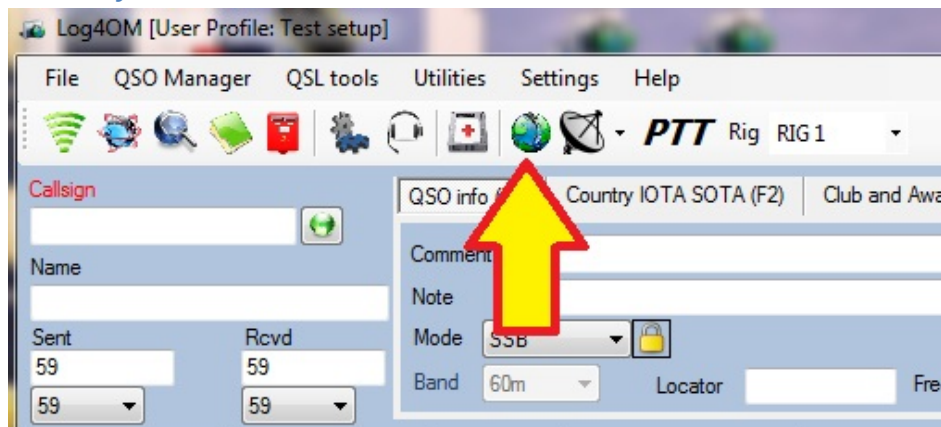
Print config

Save config

1. Select the devices to be used for the transmission of the keyer messages in the 'From/To Radio' drop down menu's
2. Choose the recording and playback devices in the 'Call recording' panel

3. Provide a 'File name' for each memory.  
*Note: Until a recording is completed the file name box will be highlighted Red.*
4. Hold down the red button to the right of a memory and record a message using a microphone connected to the computer – At the end of the recording release the record button.  
*Note: The file name box will change to green to indicate that it contains a message.*
5. Click on the headphone symbol to the right of the recording button to playback the recording for that memory.

### Voice Keyer & PTT controls



Click the button indicated above to open the voice keyer controls, these controls are detailed below



**To play a recording click and hold the relevant playback button, the recording will stop playing if the button is released.**

## Services

### **Windows Vista & 7++ - Please note**

If the user intends to link Log4OM to external programs it is necessary to run Log4OM with Windows 'Administrator privileges' for the 'Communicator' module to function correctly.



**Please note:** It is necessary to run the program with Windows 'Administrator privileges' for the communicator to function.

Log4OM can exchange information with other software by using WCF services (Windows Communication Foundations); these are web services for the Dot NET environment.

It is necessary to supply the program with the address of the listening service, the port and name of the service. Pressing the key 'START' activates the service and opens the Log4OM Communicator module, which allows use of the Log4OM databases by external software. It typically provides insertion of QSO, reading of LOG, activating a rotator etc.

By copying and gluing the link produced in the window, it is possible to verify the operation of the web service using HTTP rather than the normal procedure TCP.

CAUTION: SOME FIREWALLS DO NOT APPRECIATE THE OPENING OF SERVICES HTTP AND MAY WARN OF AN INTRUSION AND BLOCK THE COMMUNICATION. IN THIS EVENT, GIVE THE FIREWALL PERMISSION TO ALLOW THE SERVICE TO WORK.

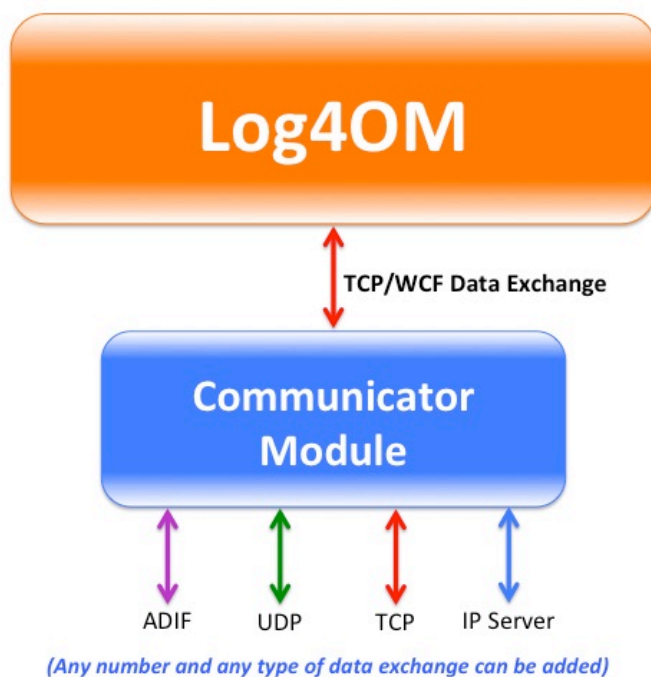
Check the Auto Start box if the Communicator will be required every time Log4OM is started.

If the IN/OUT Communications Services is not started, click the 'Start' button. The WCF Services will be started and the Communicator window will open.

**WHEN ALL THE TABS HAVE BEEN COMPLETED CLICK 'SAVE CONFIG'**

## Communicator.

The Log4OM Communicator module provides data exchange with external programs such as FIDigi, DM780, PSTRotator etc.

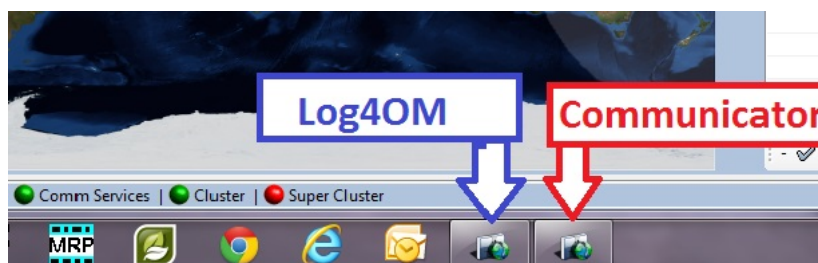


## **Windows Vista, 7 and 8**

*Please note: It is necessary to run the program with Windows 'Administrator privileges' for the communicator to function.*

### **Administrator Privileges**

When the Communicator is started it runs minimized as shown below

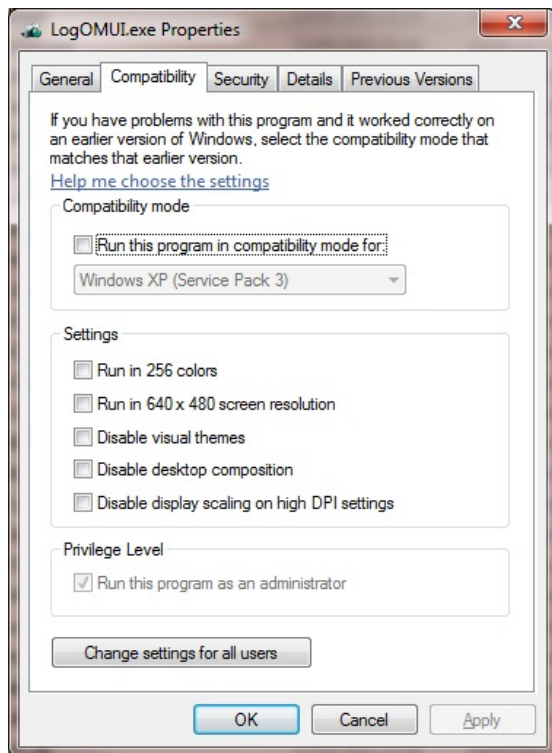


If it is not running it is because Log4OM is not running with administrator privileges.

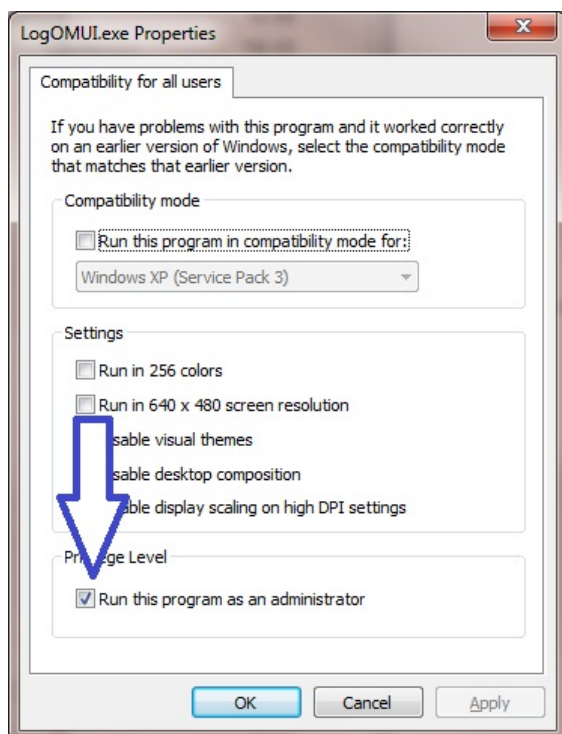
Locate the Log4OM application exe at C:\Program Files\IW3HMH\Log4OM for Windows 7 32 bit or at C:\Program FilesX86\IW3HMH\Log4OM for Windows 7 64 bit

Locate the LogOMUI.exe and right click on the file and select 'Properties'.

In the 'Compatibility' tab click the bottom button marked 'Change settings for all users'



Ensure the bottom box marked by the Blue arrow 'Run this program as an administrator' is checked.

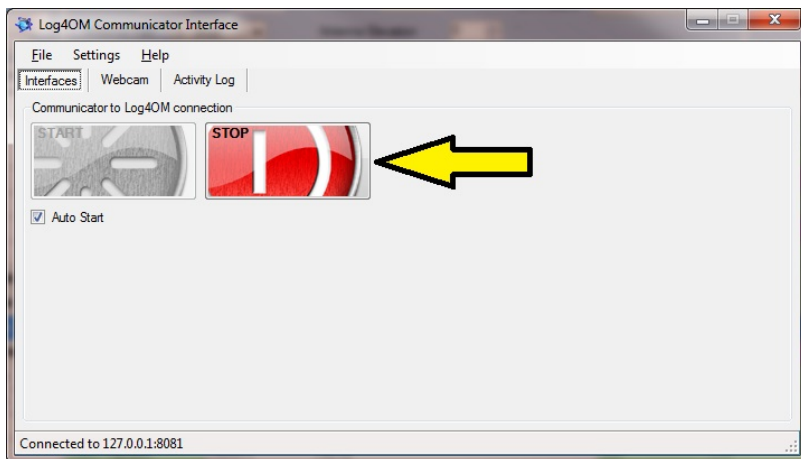


Click 'Apply' and then OK to close this window.

Click OK for the remaining window and return to your desktop.

Restart Log4OM, the Communicator will run and be minimized as in the first image.

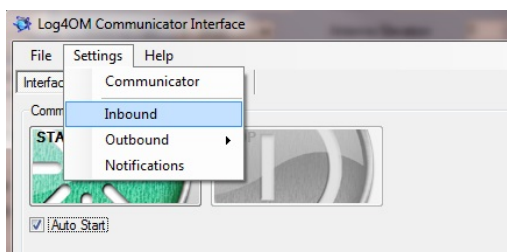
## Setting up Communicator



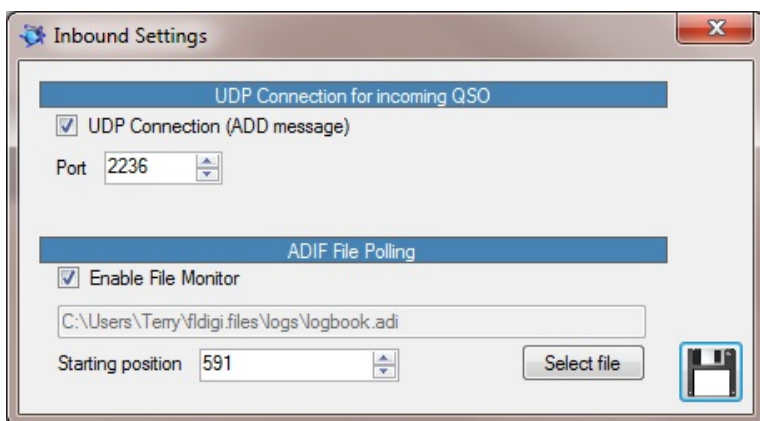
The communicator will have started automatically when started from the 'Services' tab of the options menu and should be minimized to the windows task bar during use.

To edit any of the services it is necessary to stop the Communicator by clicking the 'Stop' button indicated

## Inbound - Messages



Select 'Inbound' from the Settings menu to access the 'UDP Connection for incoming QSO' (DM780 etc.) and 'ADIF File Polling' (FLDigi and similar ADIF files) setup menu.



## Inbound messages by UDP

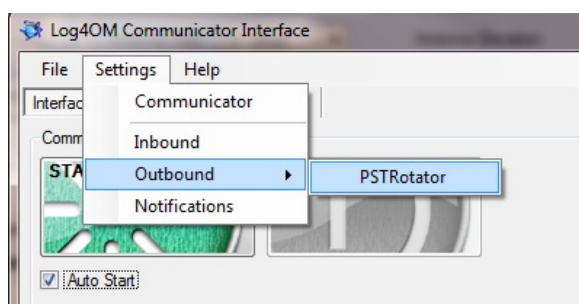
- Check the 'UDP Connection' check box.
- Insert the Port number e.g. Port 2236 for incoming data from DM780.

## ADIF Polling

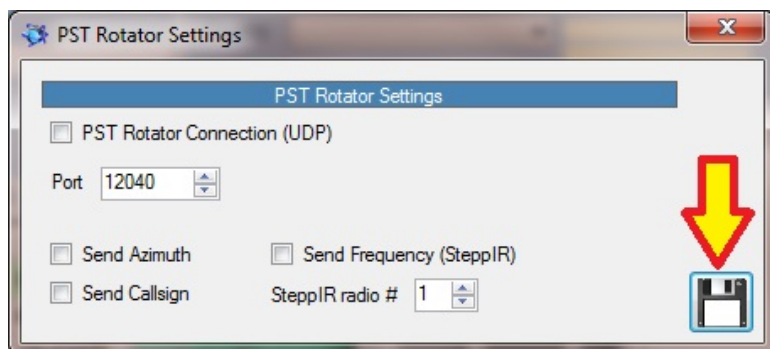
ADIF Polling allows Log4OM to monitor any ADIF file for changes and add any changes found to the Log4OM logbook.

- Complete the path to the required for ADIF file by clicking the 'Select file' button.
- Check the 'Enable File Monitor' check box.
- Click the 'Save button'.

## PST Rotator Support



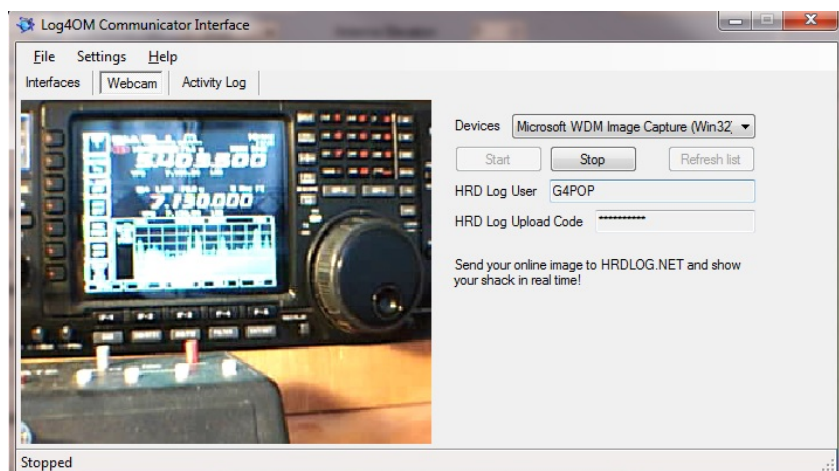
Select 'Outbound' from the Settings menu to access the 'PSTRotator' menu.



- Select the Port number to correspond with the UDP port set in PSTRotator.
- Check the 'Send Azimuth' and 'Send Callsign' boxes.
- If using a SteppIR antenna select this check box.
- Click on the save icon indicated above.

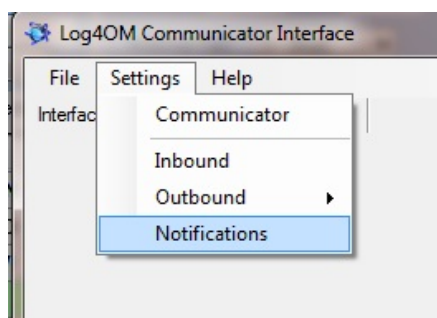
## Webcam

To send your online image to HRDLog.net select a webcam and click 'Start' the user name and upload code are automatically completed from the Options/External Logs menu.

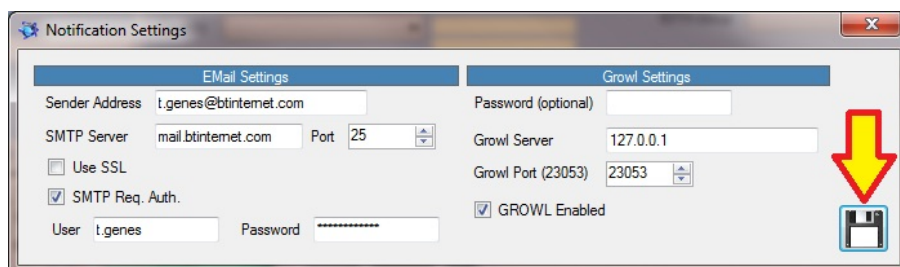


## Notifications - Alerts.

The DX Cluster can trigger alerts to be sent to various locations

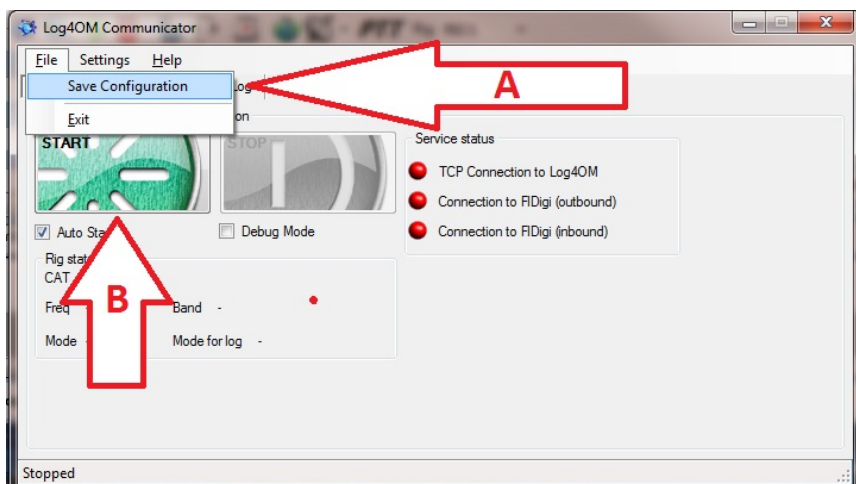


Select 'Notifications' from the settings menu to setup communications for the notifications (Alerts)



Insert the information for the outgoing email connection and also Growl if notifications to a mobile phone or another computer are required. When finished click the 'Save' button indicated by the arrow.

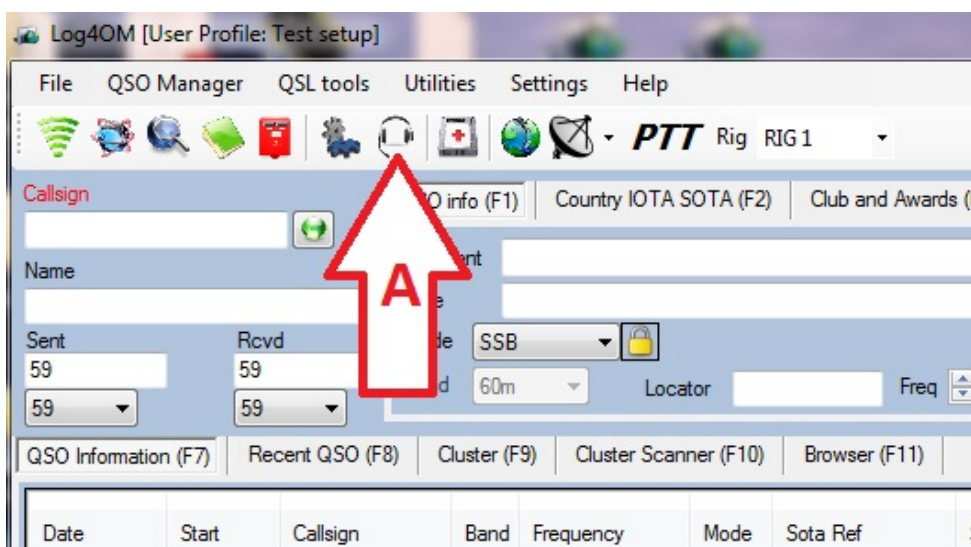




- A - Save the configuration
- B - Restart the Communicator
- **Minimize** the Communicator window – **Do not close it!**

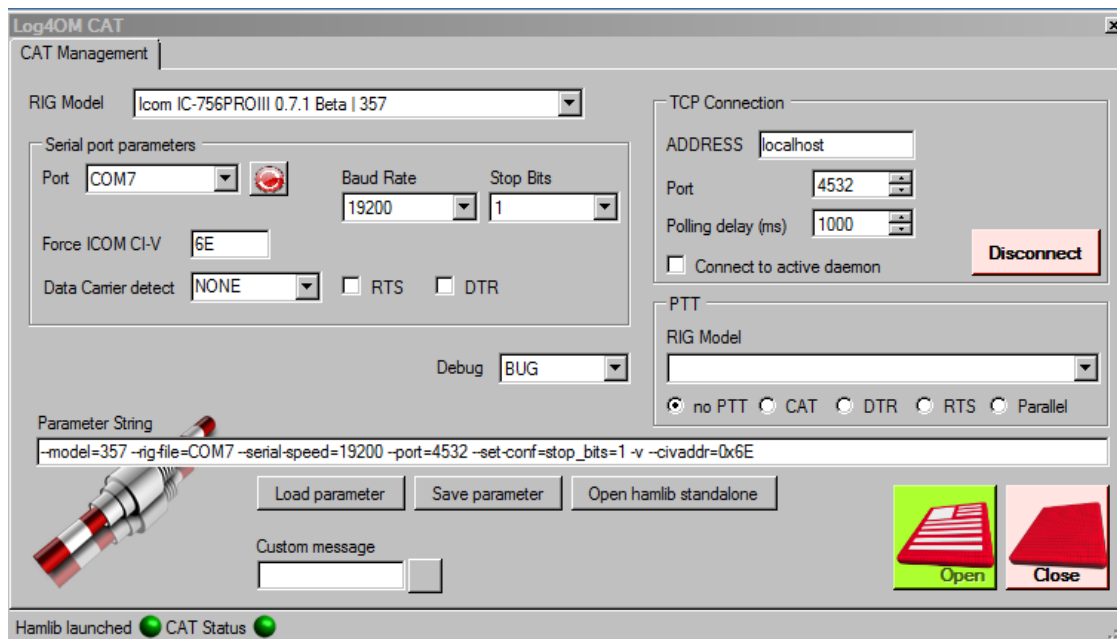
## Radio connection

To open the 'Radio Connection' window click the icon identified by "A" below.



Depending on whether Hamlib or OmniRig for rig control is selected, the following will open:

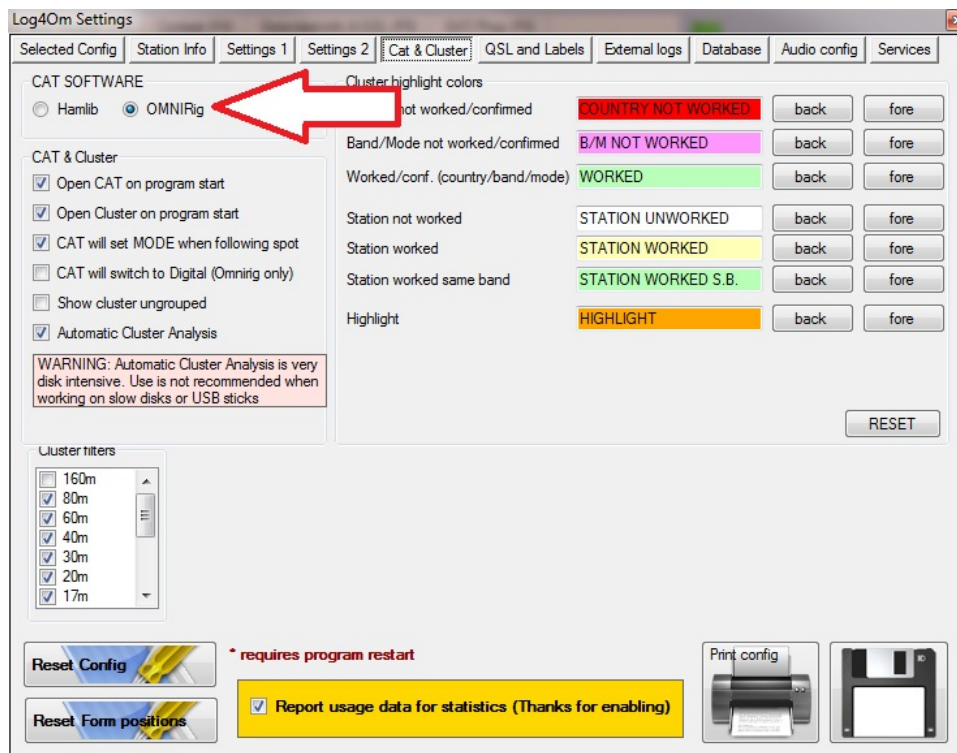
## Hamlib control:



## OmniRig control:

*Download Omnirig from <http://dxatlas.com/OmniRig/> and install it. Then re-start LOG4OM*

In the Options (Settings) window go to the 'CAT & Cluster' tab and select the Omnirig option.

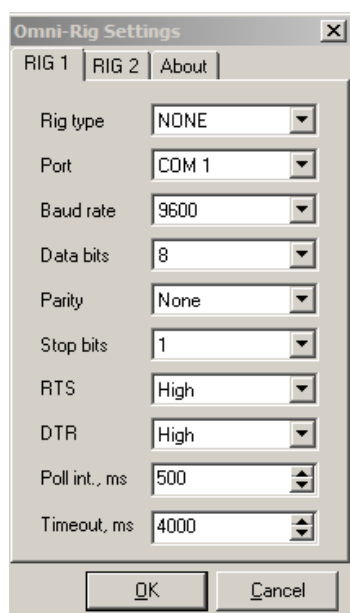


Click the 'Save Config' button.

In the main screen, click the 'CAT' icon.



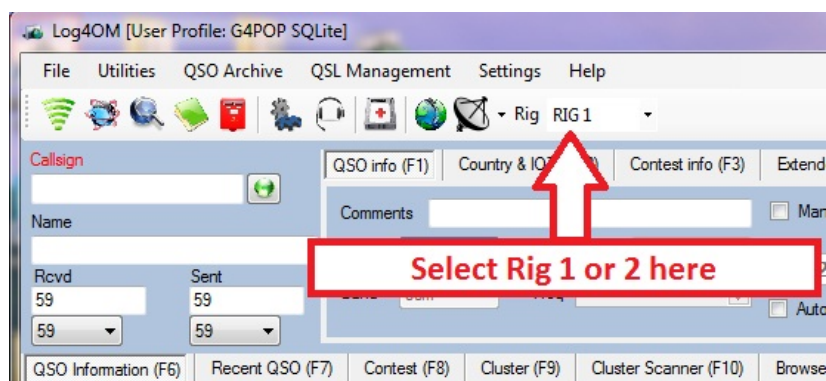
Select the appropriate rig from the Rig Model Drop-down. Set the parameters for the equipment to be used and click OK.



The CAT Status indicators at the bottom should now be GREEN indicating a successful connection.

### SO2R (Beta) and dual radios

When using Omnirig it is possible to switch between two different radios using the Rig 1 & Rig 2 selection on the toolbar as shown below. Basic SO2R operation is therefore possible using dual interfaces.

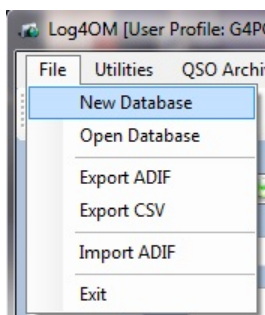


## Starting a New logbook!

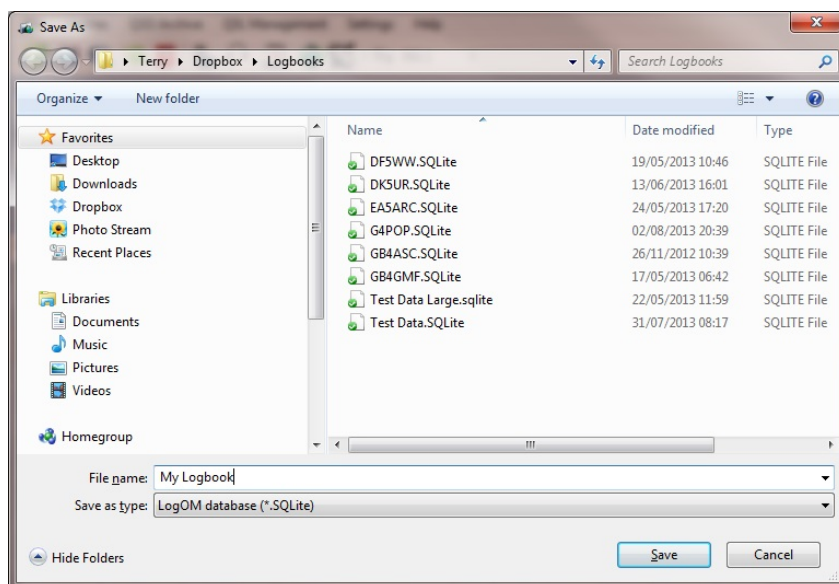
### New Database

The user may have as many databases (Logbooks) as required e.g. Main call sign, Contest call sign or Special Event call sign etc.

1. Click the 'File' menu.
2. Select 'New Database'



Select a location to store the database and provide a name for the database.

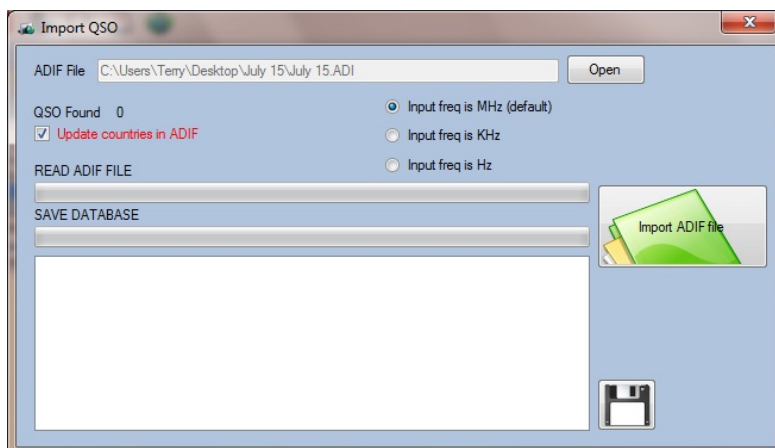


3. Click 'Save'
4. Enter QSOs in the input window or import an ADIF file created by another logbook program.

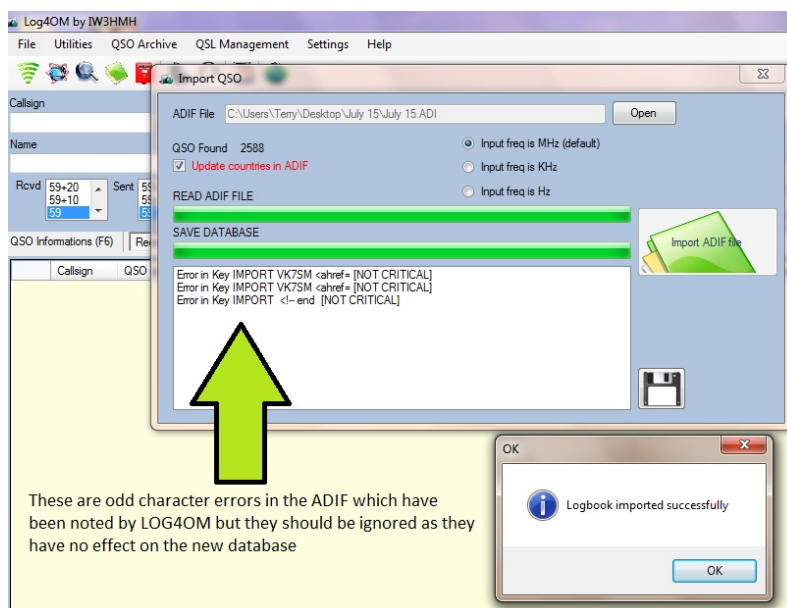
## Importing an ADIF file

**IMPORTANT. Before importing an ADIF, ensure that the latest countries file from the 'Settings' menu has been downloaded.**

1. In the 'File' menu select 'Import ADIF'
2. Click 'Open' and locate the ADIF file to be imported



3. If required check the 'Update countries in ADIF' check box (**Caution this selection could make undesirable changes to your data. If in doubt do not use it!**)
4. Click the Green 'Import ADIF file' button.



*Some 'Error in key' messages (as shown above) may appear on the screen. If they say 'Not Critical' they can be ignored because they are reporting that LOG4OM has detected some character errors in the ADIF and corrected them.*

5. Click 'OK' and close the import window.

*To print the list of errors, click on the diskette button before closing this window.*

The imported data will appear in the 'Recent QSOs' window. The QSO count, at the bottom of the screen, should correspond to the 'QSO found' number displayed in the 'Import QSO' window.

QSO date	QSO start time	Callsign	Country	Band	Frequency	Mode	RST sent	RST rcvd
30/07/2013	09:31:47	ZD7FT	Saint Helena	20m		SSB	59	59
29/07/2013	11:20:42	TK/IK0GDG/P	Corsica	20m	14,030.000	CW	599	599
27/06/2013	16:31:30	GW0SYN	Wales	20m	3,781.000	SSB	59	59
14/06/2013	14:34:00	IK6CVI	Italy	20m	14,072.368	PSK31	599	599
13/06/2013	16:08:00	IK8DYE	Italy	20m	14,071.432	PSK31	599	599
12/06/2013	07:09:38	2E0XPR	England	80m	3,760.000	SSB	59	59
12/06/2013	07:08:39	G0DWD	England	80m	3,760.000	SSB	59	59
10/06/2013	19:11:00	UA5GF	European Russia	20m	14,070.858	PSK31	599	599
10/06/2013	19:02:00	IK6CVI	Italy	20m	14,071.083	PSK31	599	599
25/05/2013	07:18:00	IK5FKB	Italy	20m	14,072.105	PSK31	599	599
17/05/2013	11:38:29	G3RFX	England	20m		SSB	59	59
21/04/2013	15:42:00	OH2MRS	Finland	20m	14,070.833	PSK31	599	599
19/04/2013	09:50:12	G0EJQ	England	40m	7,130.000	SSB	59	59
19/04/2013	09:47:08	G6INU	England	40m	7,130.000	SSB	59+20	59+20
22/02/2013	08:58:05	G0NCE	England	60m	5,403.500	SSB	59+30	59+30
22/02/2013	08:52:53	G0JMZ	England	60m	5,403.500	SSB	59+20	59+20
22/02/2013	08:42:42	M0VEY	England	60m	5,403.500	SSB	59+20	59+20
22/02/2013	08:42:17	GW0SYN	Wales	60m	5,403.500	SSB	59+20	59+20
21/02/2013	11:03:46	DK5DR	Fed. Republic of Germany	40m	7,131.000	SSB	59+20	59+20

Layout Refresh Search Parameters Records found: 4847  Detach Grid Search limit count (0 = all) 5000

QSO: 4847 ● CAT status | ● HRDLog ON AIR | ● Comm Services | ● Cluster | ● Super Cluster C:\Users\Terry\Dropbox

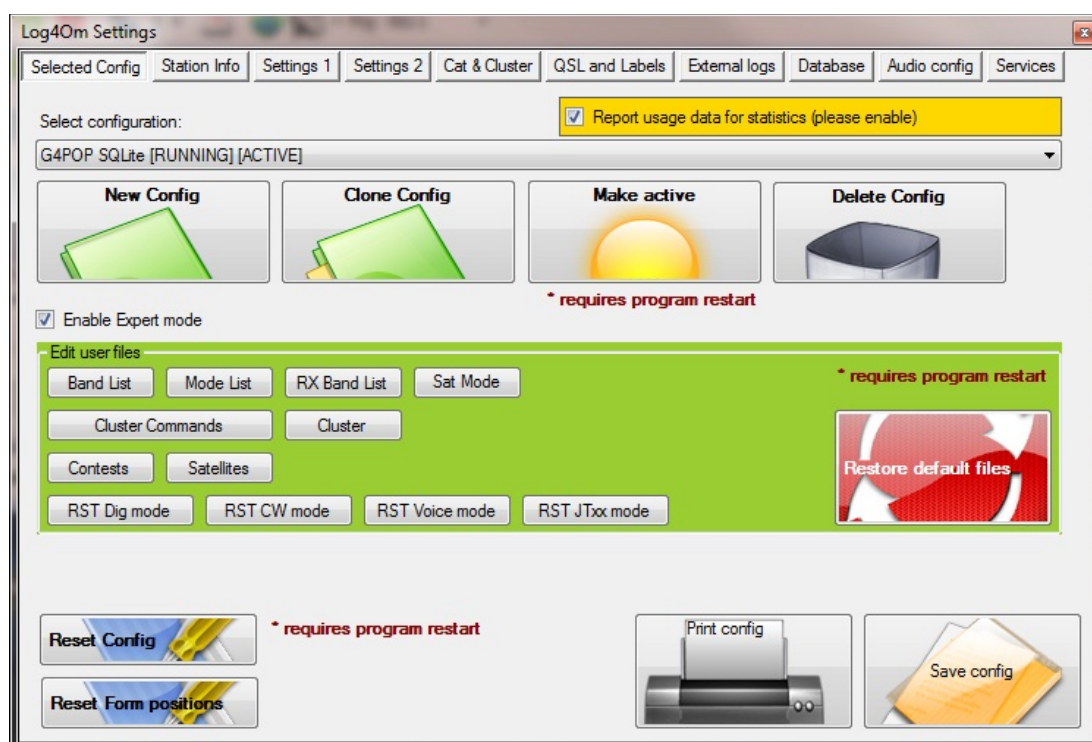
## Setting up multiple profiles

Most users will require only one user profile but in the case of DXpeditions, special event stations, contest operations and users with more than one station location, it is necessary to keep all information regarding location, call signs and station set up in completely separate profiles.

LOG4OM is one of the few logging programs that provide full customisation of different station profiles.

### How to set up multiple profile configurations

In the 'Settings' window select the first tab 'Selected Config'.



If most of the new profile information is the same as the selected profile then select 'Clone Config' and proceed to the 'Station Info's' tab....

Log4Om Settings

Selected Config | **Station Info** | Settings 1 | Settings 2 | Cat & Cluster | QSL and Labels | External logs | Database | Audio config | Services

Station Info's

Profile description: **Test setup**

Station Callsign: G4POP

My Locator: JP01JP

Operator Callsign: G4POP

Country: England

EU ITU: 27 | CQ: 14 | DXCC: 223

IOTA Group:

IOTA Island:

IARU Region will determine your bandplan

IARU Region: 1

My USA-CA Counties:

My VUCC Grids:

Owner Callsign: G4POP

Operator name: Terry Genes

My Street: 28 Hillside Road

My City: Burnham on Crouch

My Postal Code: CM0 8EY

My Rig: Icom IC756 ProIII

My Sig:

My Sig info:

Tx Power: 0.000

Antenna (\*): 140ft Doublet

My Rists:

My SOTA:

Reset Config \* requires program restart

Reset Form positions

Print config

Report usage data for statistics (Thanks for enabling)

Change the profile description and change any other information required on all tabs, and click 'Save config'.

If most of the details of the new profile differ, click the 'New Config' button in the 'Selected Config' tab and proceed to the 'Stations info's' tab.

Log4Om Settings

Selected Config | Station Info | Settings 1 | Settings 2 | Cat & Cluster | QSL and Labels | External logs | Database | Audio config | Services

Select configuration:  Report usage data for statistics (please enable)

G4POP SQLite [RUNNING] [ACTIVE]

New Config

Clone Config

Make active \* requires program restart

Delete Config

Enable Expert mode

Edit user files

Band List | Mode List | RX Band List | Sat Mode

Cluster Commands | Cluster

Contests | Satellites

RST Dig mode | RST CW mode | RST Voice mode | RST JTx mode

Restore default files

Reset Config \* requires program restart

Reset Form positions

Print config

Save config



Enter the desired Profile description where it shows 'New Configuration'.

Log4Om Settings

Selected Config | Station Info | Settings 1 | Settings 2 | Cat & Cluster | QSL and Labels | External logs | Database | Audio config | Services

Station Info's

Profile description **Test setup** Owner Callsign G4POP

Station Callsign G4POP Operator name Terry Genes

My Locator JP01JP My Street 28 Hillside Road

Operator Callsign G4POP My City Bumham on Crouch

Country England G Active DXCC 223

EU ITU 27 CQ 14 My Postal Code CM0 8EY

IOTA Group My Rig Icom IC756 ProIII

IOTA Island My Sig

IARU Region will determine your bandplan  
IARU Region \* 1 Find using my ITU See IARU / ITU Zones

My USA-CA Counties Example: MA, Franklin, MA, Hampshire

My VUCC Grds Example: EN98, FM08, EM97, FM07

My Tx Power 0.000

Antenna (\*) 140ft Doublet

My Fists

My SOTA

Reset Config \* requires program restart

Reset Form positions

Print config

Report usage data for statistics (Thanks for enabling)

Complete the information relevant to the new profile on all of the tabs and click 'Save Config'. The settings window will close and revert to the original profile.

To use the new profile, it must be made active so restart the program and open the 'Settings' window again. Then select the required new profile from the drop down list.

Log4Om Settings

Selected Config | Station Info | Settings 1 | Settings 2 | Cat & Cluster | QSL and Labels | External logs | Database | Audio config | Services

Select configuration: Report usage data for statistics (please enable)

G4POP SQLite [RUNNING] [ACTIVE]

All Saints Church

Glenn Miller Festival

G4POP MySQL

G4POP SQLite [cloned]

G4POP SQLite [RUNNING] [ACTIVE]

Enable Expert mode \* requires program restart

Edit user files

Band List Mode List RX Band List Sat Mode \* requires program restart

Cluster Commands Cluster

Contests Satellites

RST Dig mode RST CW mode RST Voice mode RST JTx mode

Restore default files

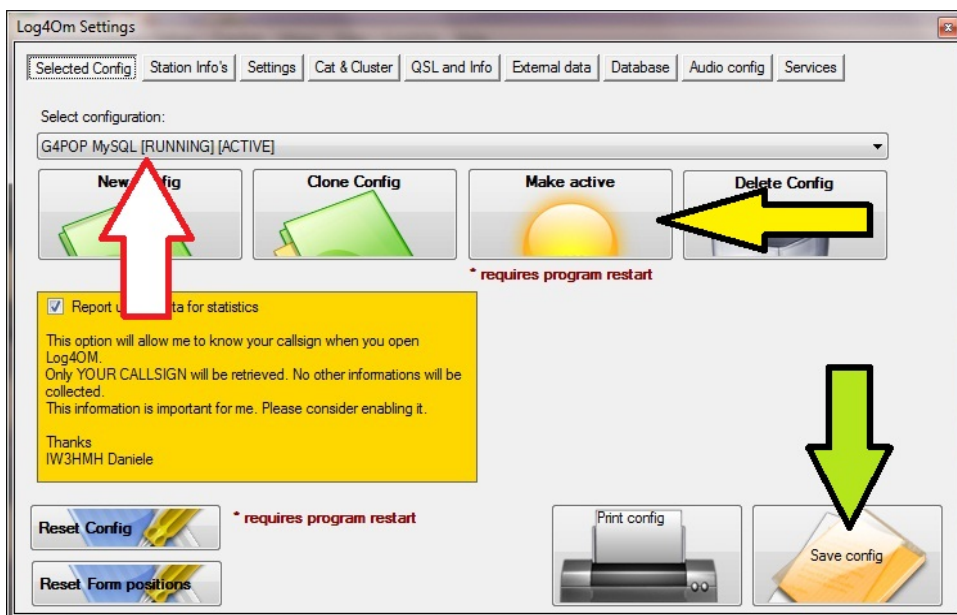
Reset Config \* requires program restart

Reset Form positions

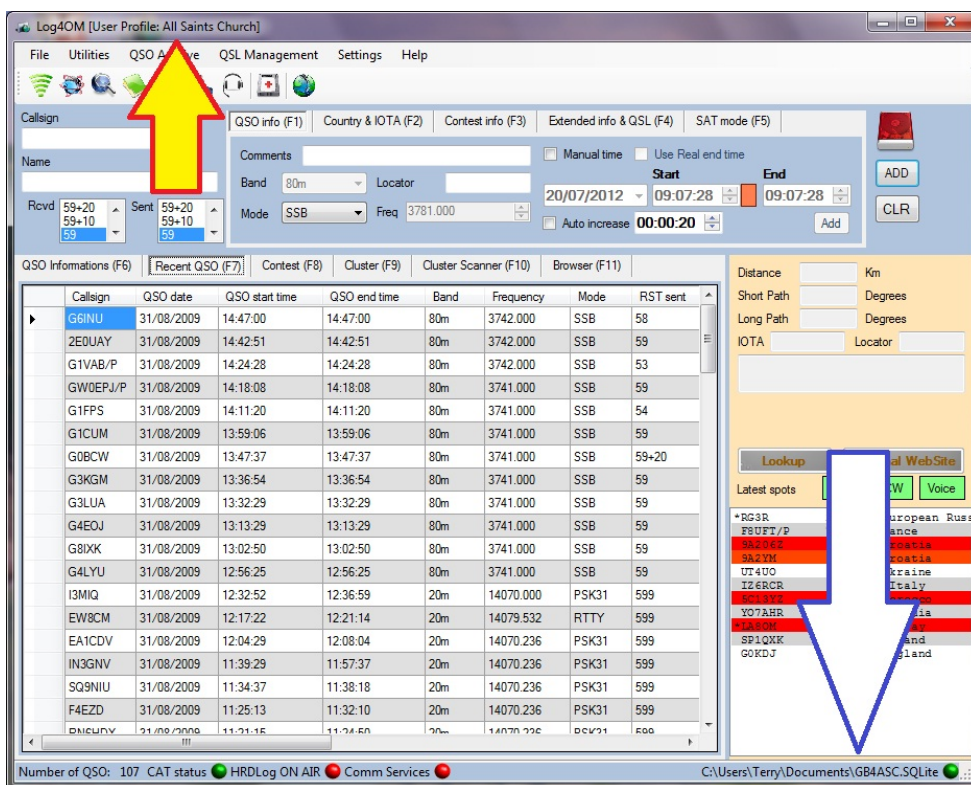
Print config

Save config

Click on the 'Make Active' button and then click 'Save Config' – Now close LOG4OM.



Restart LOG4OM and the chosen profile will be loaded and identified at the top of the LOG4OM window.



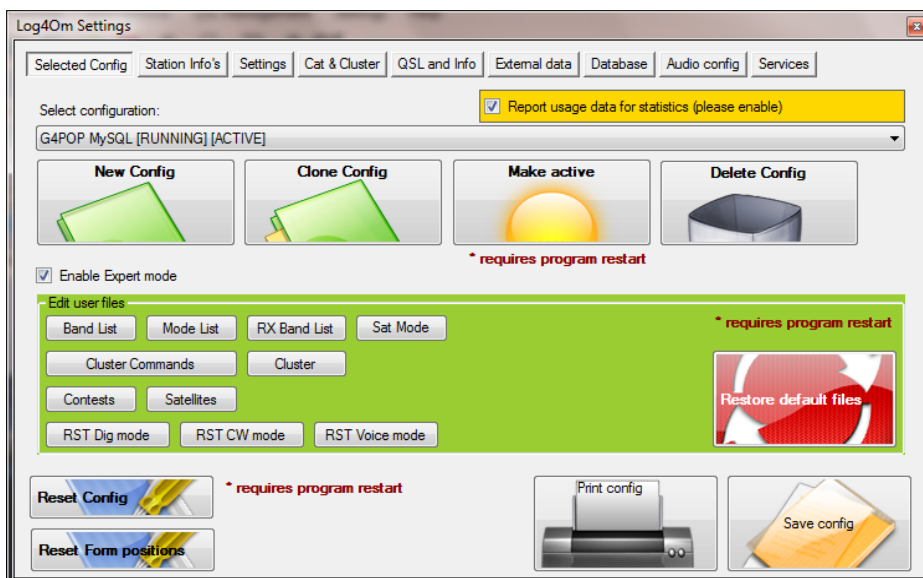
Once a new database has been created for this new profile and an ADIF imported or the QSOs entered manually, the database name will be displayed in the lower right corner of the LOG4OM window.

## Editing User files

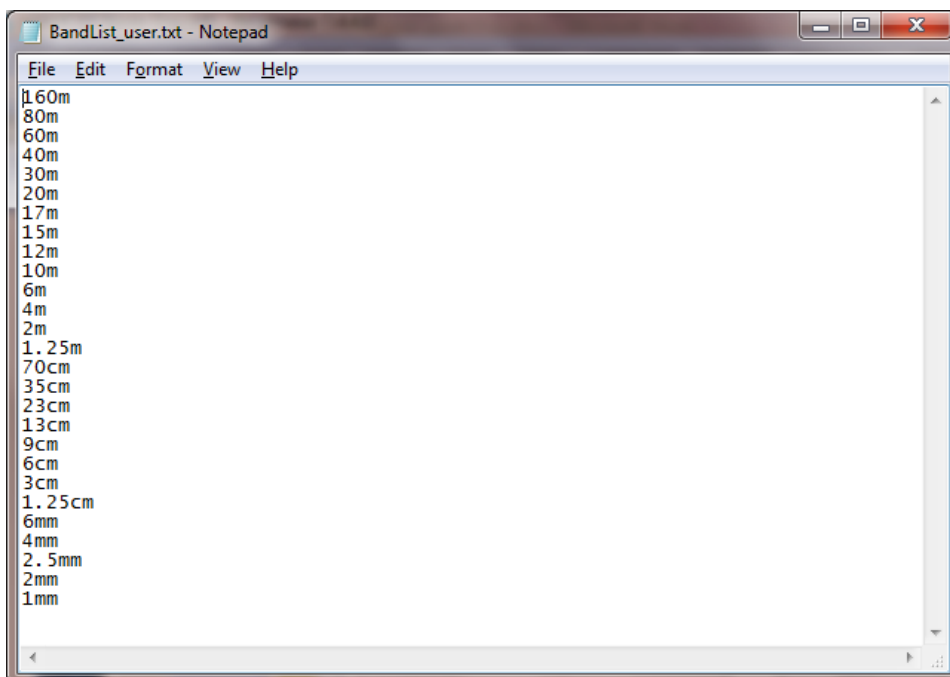
By checking the box 'Enable Expert Mode' in the 'Selected Config' tab of the 'Settings' menu, it is possible to change the various table lists in the program.

*Example:*

By clicking the 'Band List' Button, the list can be edited so if the user does not wish to use the VHF/UHF/SHF bands, they can be removed from the table.



Clicking the 'Band list' button will display this window.



Once the file has been edited click 'Save' in the File menu.

A 'Restore Default Files' button is provided to allow the user to return to the standard lists.

The same process can be used to personalise the following lists:-

Bands

Modes

RX Bands

Sat Modes

Cluster Commands

Cluster services

Contests

Satellites

RST values for Digital, CW, Voice & JT Modes

## Call Sign Lookup

Log4OM has the most accurate call sign lookup system of any software available.

The first step that Log4OM takes is to determine exactly what the call sign is from inputs such as CT/G4POP/P, VP2M/K7PT or J5/IW3HMH/M.

Operators that incorrectly use the country prefix as a suffix e.g. G4POP/CT/P or K7PT/VP2M cause further complications.

Unfortunately to enable correct matching in LOTW and eQSL submissions Log4OM has to present these incorrect layouts as received.

In the case of K7PT/VP2M this is an American operator in Montserrat and Log4OM must display the following data correctly.

Country = Montserrat

DXCC = 96

ITU zone = 11

CQ zone = 8

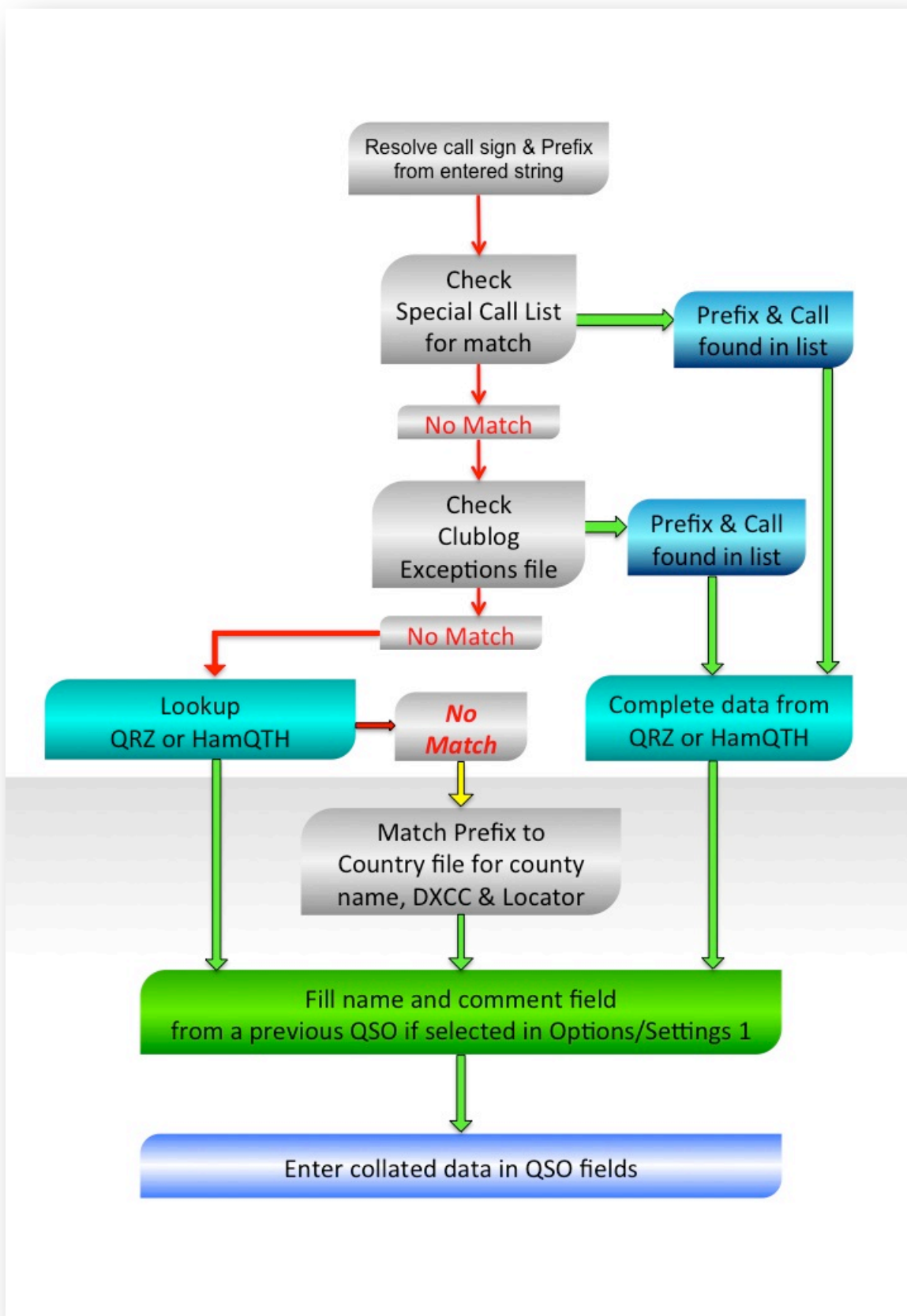
QSL route

Heading and distance to Montserrat (Not Phoenix Arizona)

Display the correct heading from the operators location to Montserrat correctly on the grey line map.

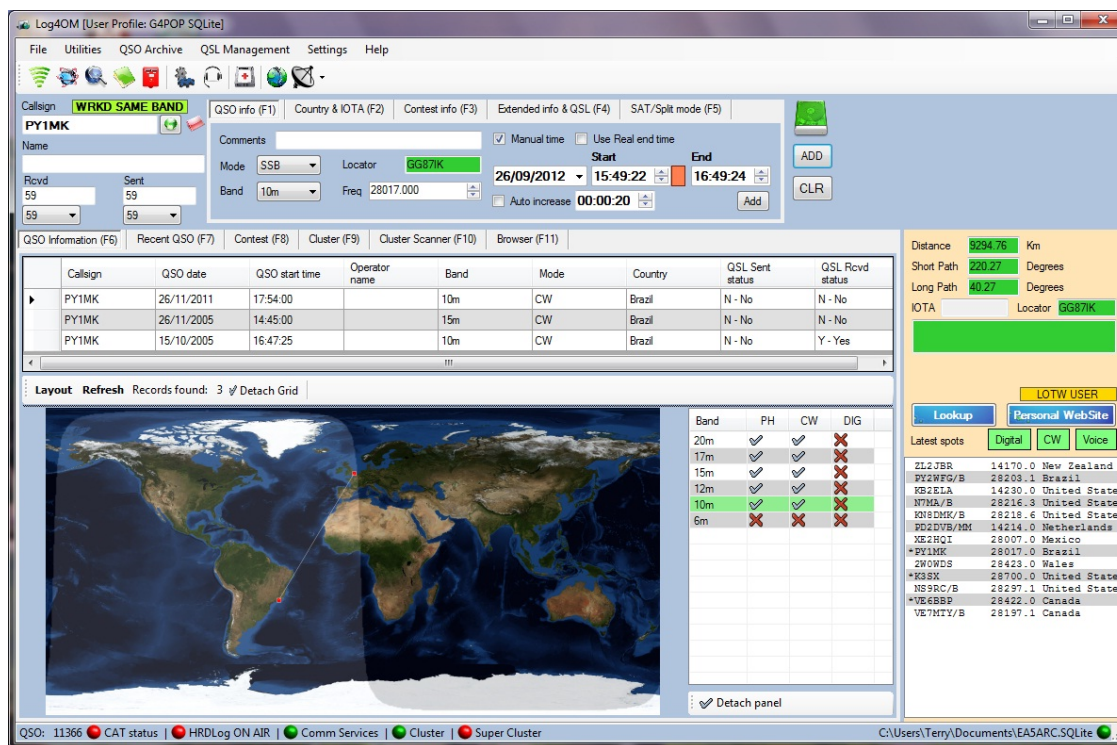
Worked before Band/Mode data for awards = Montserrat

Assuming that the user has correctly completed the Log4OM options regarding his own station location details and the lookup information for external sources in the 'Settings 1' tab of the options window then the flow for defining a call sign and lookup data will be as follows.



## Main Screen

The main window in the upper portion shows relevant data for a selected spot or entered call sign. The lower portion contains various sub screens for log display, cluster data, etc.



Upon entering a call sign or selecting a cluster spot, all available information for the station is obtained via the sources selected by the user, SCL, Clublog, Previous QSOs, HamQTH or QRZ.

## Keyboard Operation

LOG4OM can be used for more time efficient operation during a contest, DXpedition or pile up situations by using just a keyboard.

Many users find it a great advantage, both in terms of speed and ease of use, if they do not have to change between using a keyboard and a mouse.

The program provides function keys for this purpose, as per the following list:

The function keys will operate, as applicable, to the active window whenever more than one window is open. e.g. Cluster or Super Cluster.

## Frequency number convention.

Frequency entries made in the new QSO 'Freq' field and also in the edit/update windows are in Kcs so enter 14215.678 and the program will display 14.215.678

## Keys

### Tab key

The program starts with the cursor in the call sign entry field. Once the call has been entered, the operator can progress through the important data input fields by pressing the 'Tab' key.

### Esc key

Use the escape (Esc) key to clear the current data entry and return the cursor to the call sign input field.

### Return (Enter) key

Use the 'Return' (Enter) key to save the entry to the logbook once the required information has been entered in the QSO entry fields.

### Cursor keys (Up, Down, Left & Right arrows)

Use the cursor keys to move the cursor within a field or to select from a list. e.g. to select a spot from the cluster F9 window or a country from the 'Countries' list in the F2 pane.

### Bk Sp (Back space) key

Use this key to delete any unwanted characters that have been entered.

## Function Keys

F1 – Opens the QSO information pane.

F2 – Activates the Country & IOTA window.

F3 – Club & Awards tab



F4 – Contest Tab - to enable check the ‘Enable Contest Mode’ box.

F5 – Extended Info & QSL

F6 – Sat/Prop (Satellite and Propagation tab)

F7 – QSO information tab showing previous contacts with the entered call sign, countries worked by band and mode, plus a Grey line map.

Date	Start	Callsign	Band	Mode	Sent	Rcvd	Name	Comment	Country	DXCC	QTH	Locator	My Sota
29/04/2012	07:43:27	G3RFX	80m	SSB	59	59	Martyn	Ex RSGB news man	England	223	Clifton Bristol	IO81QL	
09/02/2012	08:45:14	G3RFX	80m	SSB	59	59	Martyn		England	223	Clifton Bristol	IO81ql	
29/01/2012	08:45:16	G3RFX	80m	SSB	59+40	59+40	Martyn		England	223	Clifton Bristol	IO81ql	
29/01/2012	07:59:21	G3RFX	80m	SSB	59+40	59+40	Martyn		England	223	Clifton Bristol	IO81ql	
15/01/2012	08:56:58	G3RFX	80m	SSB	59+40	59+40	Martyn		England	223	Clifton Bristol	IO81ql	

England			
Band	PH	CW	DIG
80m	C		C
60m	C		
40m	C	C	C
30m			C
20m	W		W
17m	W		
15m	W		
12m			
10m			

F8- The recent QSO tab displays the most recent log entries

Date	Start	Callign	Band	Mode	Sent	Rcvd	Name	Comment	Country	DXCC	QTH	Locator	My Sota Ref
08/03/2014	09:47:48	G10HWO	60m	SSB	59	59	John Crawford-Baker		Northern Ireland	265	Islandmagee, County Antrim	IO74DT	
08/03/2014	09:47:16	G4AMF	60m	SSB	59	59	JACK CRESSWELL		England	223	Blackwell, ALFRETON	IO91VL	
04/03/2014	08:13:22	G10HWO	60m	SSB	59	59	John		Northern Ireland	265	Islandmagee	IO74DT	
04/03/2014	08:07:52	OZ1QV	60m	SSB	59	59	Grahame	Also OZ1RAF	Denmark	221	Falster Island	JO55TN	
02/03/2014	10:38:10	G4AMF	60m	SSB	59	59	JACK CRESSWELL		England	223	Blackwell, ALFRETON	IO91VL	
02/03/2014	10:37:48	G8ZGK	60m	SSB	59	59	DERF A. A. MOCKFO...		England	223	Old Tring Road, Wendover, A...	IO91PS	
28/02/2014	16:15:16	G10HWO	60m	SSB	59	59	John		Northern Ireland	265	Islandmagee	IO74DT	
28/02/2014	16:15:16	G8HQJ	60m	SSB	59	59	Bary		England	223	Littlehampton	IO90RT	
28/02/2014	16:15:16	GM3XOQ	60m	SSB	59	59	Peter		Scotland	279	Inverurie	IO875F	
28/02/2014	16:15:16	G4HHX	60m	SSB	59	59	Dick		England	223	Dover	JO01PD	
28/02/2014	15:15:54	G6NHY	60m	SSB	59	59	Keith Marriott		England	223	Hucknall, NOTTINGHAM	IO93jb	
26/02/2014	20:21:23	OZ1QV	60m	SSB	59	59	Grahame	Also OZ1RAF	Denmark	221	Falster Island	JO55TN	
26/02/2014	20:17:29	OK1CW	60m	SSB	57	57	Vladimir . (Vada) Stad...		Czech Republic	503	25101 Ricany	JN79HX	
26/02/2014	20:11:13	LI0BX	60m	SSB	59	59			Norway	266			
26/02/2014	20:02:26	G4AMF	60m	SSB	59	59	Jack		England	223	Alfreton Derbyshire	IO91VL	
26/02/2014	20:00:35	TF1EIN	60m	SSB	59	59	Heimir Konradsson		Iceland	242	Hvergerdi	HP94JA	
26/02/2014	19:59:56	G8HQJ	60m	SSB	59	59	Bary		England	223	Littlehampton	IO90RT	
26/02/2014	19:52:41	G3VOT	60m	SSB	59	59	George		England	223	Ashford-in-the-Water, Near B...	IO93DF	
26/02/2014	19:51:43	G10HWO	60m	SSB	59	59	John		Northern Ireland	265	Islandmagee	IO74DT	
23/02/2014	10:45:01	IW3HMH	17m	SSB	59	59	Lele	Nice QSO and good to chat	Italy	248	Quarto d'Altino (VENICE)	JN65EO	

Layout Refresh Search Parameters Records found: 3625 Detach Grid Search limit count (0 = all) 5000

QSO: 3625 CAT status HRDLog ON AIR Comm Services Cluster Super Cluster

F9 – The cluster pane provides instant information about the DX spots and Filter choices.

Time	Callign	Country	Frequency	Note	Band	Mode	Reporter	Rank	Other info
1054Z	LZ1246SIT	Bulgaria	24930.0	BOJAN 73 ALEX	12m	PHONE	OP4L	315	BOJAN 73 A
1054Z	AT5LH	India	28596.9	trx qso with hexbeam 40w.73	10m	PHONE	F8BNU	247	1030Z PE7L
1054Z	WL7E	Alaska	24907.1	599++	12m	CW	LA7HJA	271	599++
1054Z	NL7G	Alaska	24897.0	599++	12m	CW	LA7HJA	271	1024Z DF5V
1053Z	A92AA	Bahrain	28120.5	PSK125; via IZ8CLM	10m	PHONE	DJ9KG	182	1050Z PA3G
1051Z	ON5SE/P	Belgium	7000.0	Afternoon go >> ONFF 369-New	40m	CW	ON5SE	327	Afternoon go
1051Z	EK7DX	Ameria	28021.0	simplex trx Karen 73 Helmut	10m	CW	DJ7YP	143	1032Z DL1A
1051Z	R2014G	European Russia	14000.0	impossible not exist	20m	CW	EA6SA	334	1047Z DK0P
1050Z	7X2ARA	Algeria	24949.9	cq cq	12m	PHONE	DL3APO	148	1048Z OP4L
1050Z	RA22MX	Asiatic Russia	24947.0		12m	PHONE	DJ0AH	325	
1048Z	BG2AUE	China	28023.9	TNX FER QSO	10m	CW	ON7EZ	266	1018Z DD4E
1046Z	EA1DST	Spain	7031.0	COMANDANCIA DE LEON CW	40m	CW	EA1DST	337	COMANDAN
1045Z	KH2/N2NL	Guam	24912.9	UP1 trx DAVID 73 Helmut	12m	CW	DJ7YP	249	1044Z DL9J
1044Z	9M2IDJ	West Malaysia	28395.0	59 north Germany 73 de Peter	10m	PHONE	DD4BY	241	1028Z SA4B
1044Z	ER80KEDR	Moldova	21231.4		15m	PHONE	PA3AWW	254	
1014Z	PD0MHZ	Netherlands	28400.0	Calling CQ (corr. freq)	10m	PHONE	PD1AHM	331	Calling CQ (c
1015Z	AU3NIAR	India	28540.0	59+ north Germany 73 de Pete	10m	PHONE	DD4BY	247	59+ north G
1015Z	EA5HHA	Spain	7057.0	Magdalena 2014 sorteo	40m	PHONE	EA2FC	337	Magdalena 2
1015Z	JO7KMB	Japan	28085.5	RTTY	10m	PHONE	LA3DV	336	RTTY
1016Z	JA0IXW	Japan	28085.5	RTTY	10m	PHONE	LA3DV	336	RTTY
1018Z	GASCX	England	24904.0	special prefix scotland	12m	CW	GM0EGI	330	special prefix
1018Z	RA1DIO	European Russia	29460.0	AM BC Radio 5/9	10m	PHONE	MM3NRX	334	AM BC Radik

Filters Highlights Custom Statistics

CW  LoTW users

Digital

Phone

Remove wkrd country

Keep unworked bands

Unworked mode on Spot band

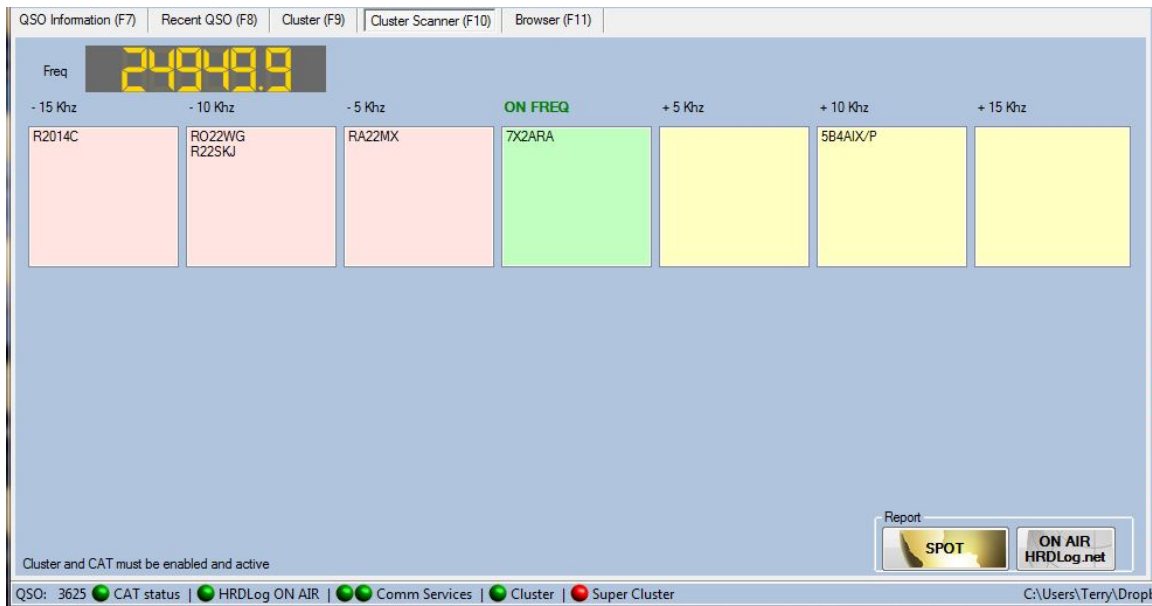
Band

Link to radio Band

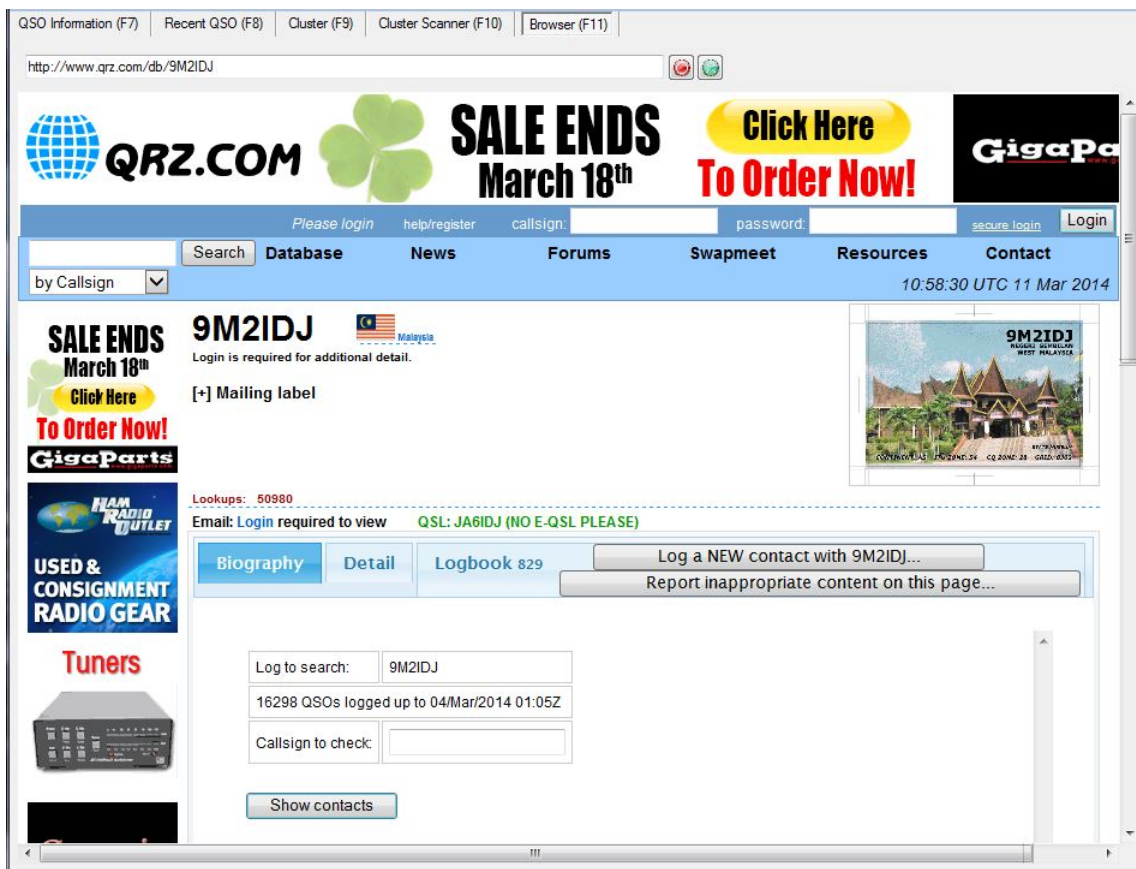
Link to radio Mode  Ext. view

QSO: 3625 CAT status HRDLog ON AIR Comm Services Cluster Super Cluster

F10 – The Cluster scanner tab displays the operator’s centre frequency and nearby DX spots.



F11 – Provides an Internet browser to display contact information or web site.



## Windows keyboard shortcut keys

These function as normal within Windows. A full list of shortcuts can be obtained from the following link. <http://support.microsoft.com/kb/126449>

The three most frequently used keyboard shortcuts for any search list in 'Archive Management' are:

- Shift + Arrow - Marks (Highlights) all entries in a list for bulk editing.
- Shift + Left mouse click – Click to highlight an entry in a list, then hold the shift key down while clicking another entry further down the list to highlight a block of entries for editing.
- Ctrl. (Control) + Left mouse click in order to select isolated entries to edit.

## QSO entry

When the application is started, the cursor is automatically positioned in the CALLSIGN field. Entering a call sign queries the logbook database for duplication of the QSO and validity.

If the call sign is a valid entity, the entity name, IOTA, CQ and ITU zone is supplied from the databases.

The red icon will appear if a valid call sign string is entered in the call sign field is a valid string, if the prefix/call sign is recognized it becomes visible. If a user types "aaaaaaaaaaaa" in the call sign field it will not be shown

## Quickly adding a DX Spot

Click the green button to the right of the entered call sign and add any comments about the contact. Click 'Send Spot' to send the spot to the cluster.

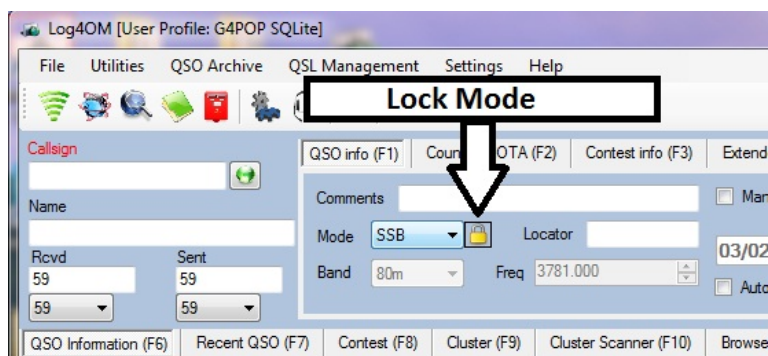
Date and time are entered automatically or manually. If the user is operating in CONTEST mode, it is necessary to include the RECEIVED contest exchange information (one press of the Enter key allows one to bypass this limitation, forcing the insertion).

**Note:** Information will NOT be recorded in the logbook if the QSOs made are stored BEFORE the return of information from external sites.

## Mode Lock

Most radios only support the basic modes, USB, LSB, CW, AM, RTTY & Data, therefore it is impossible for LOG4OM to determine when a user is operating with one of the more obscure modes e.g. JT65, ROS, SSTV, Thor etc.

To facilitate accurate log keeping when using these other modes the 'Lock' button will ensure that the selected mode is retained regardless of the mode being returned from the radio via CAT.



## Time Management

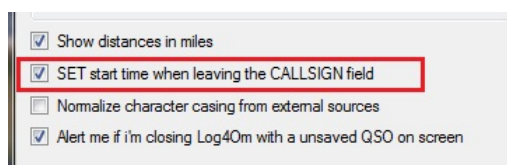
Manual time    Use Real end time

**Start**                      **End**

26/06/2012   11:50:01   11:50:01

Auto increase   00:00:20   Add

- In the Options/Settings 1 menu select "Set start time when leaving the callsign field" if the start time should be set when either tabbing out of the call sign field or clicking in another field, the QSO end time will be recorded when the QSO is added to the database.



QSO start time = The time the cursor leaves the call sign field

QSO end time = The time that the QSO is added to the logbook database

- Alternatively if the "Set start time when leaving the callsign field" is not checked and 'Manual Time' is not selected in the QSO Info screen, the time of the QSO will be set

automatically to the time of the insertion of the QSOs in the database. The end time will be the same as the start time of the QSO.

- Selecting 'Manual Time' in the F1 pane enables manual entry of date and time for entering historic QSO records.

If the end time is earlier than the start time, the program will assume that the QSO was conducted at the turn of midnight and automatically change the date accordingly.

- The Auto Increase check box increases both the start and end times of the QSO value (HH:MM:SS) and creates an interval according to the value selected. In this way, it is possible to quickly insert many QSOs close to each other. For example, by 20 seconds between each.

It is possible, at any time, to manually enter the time of the QSO and make it the start point for the following entries.

The ADD button (See previous screen shot) adds the start time indicated and the value set, and also separates the end time of the QSO from the start of the same value.

Example:

Start time 10:00:00 End Time: 10:00:00

Click on the button 'add' to skip to 00:00:20

New start time: 10:00:20 End Time 10:00:40

### *Time summary*

*Automatic mode:*

In automatic mode the QSO is allocated a start time taken from the PC in UTC.

*Manual mode:*

In manual mode it is the user's responsibility to enter the QSOs date, start and end times.

**INCREASE AUTO** option automatically advances the start and end times by the amount selected. This feature allows the user to insert sequences of QSOs quickly.

**ADD** increments to the time values. This feature can be used to insert a longer time interval between two QSOs or used as an alternative to the auto increment.

**PAGE UP - PAGE DOWN:** To manually change time, by the set value, use the keyboard Page up and down keys.

**HINT:** Click the right mouse button on the calendar to set the date / current time (UTC).

## Call Lookup

Call sign: **WRKD SAME BAND** (CY9M)  
 Name: SCL  
 CY9 St Paul Island DXpedition 2012  
 Rcvd: 59+20, 59+10, 59 | Sent: 59+20, 59+10, 59  
 QSO info (F1): Band: 20m, Mode: SSB, Freq: 14180.800  
 Country & IOTA (F2): Locator: FN97WF  
 Contest info (F3):

The screen above indicates that the call has been worked on the selected band.

Call sign: **WORKED** (CY9M)  
 Name: SCL  
 CY9 St Paul Island DXpedition 2012  
 Rcvd: 59+20, 59+10, 59 | Sent: 59+20, 59+10, 59  
 QSO info (F1): Band: 40m, Mode: SSB, Freq: 7165.000  
 Country & IOTA (F2): Locator: FN97WF  
 Contest info (F3):

The screen above indicates that the entity CY9M has been worked previously.

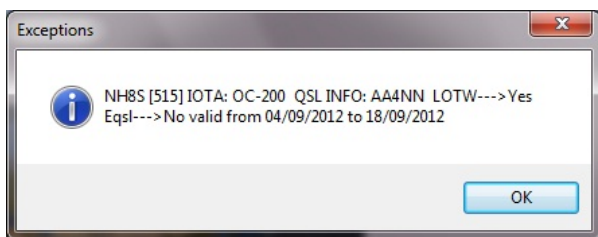
Clicking on the 'WRKD SAME BAND' or 'Worked' will display previous QSOs with the call sign entered. (See screen below)

Call sign	QSO date	QSO start time	Operator name	Band	Mode	Country	QSO Id
IW3HMH	22/12/2011	18.30	DANIELE PISTO...	20m	SSB	Italy	20111222...
IW3HMH	22/12/2011	15.49		20m	SSB	Italy	20111222...
IW3HMH	22/12/2011	15.47	DANIELE PISTO...	20m	SSB	Italy	20111222...

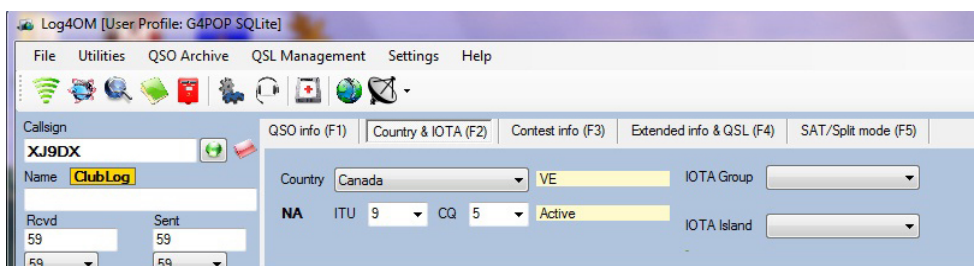
To search for special calls select 'Lookup' from the Special Call List (SCL). If the required call sign is in the SCL, the full details of the QSO will appear in the QSO fields and the SCL icon will appear below the call sign. (See below)

Call sign: **SCL** (NH8S)  
 Name: NH8S  
 SWAINS ISLAND DX CLUB  
 Rcvd: 59 | Sent: 59  
 QSO info (F1): Country: Swains Is., IOTA Group: OC-200, IOTA Island: Swains Island  
 Country & IOTA (F2): OC: ITU 62, CQ: 32, Active  
 Contest info (F3):  
 Extended info & QSL (F4):  
 SAT/Split mode (F5):

Clicking on the SCL icon will cause a pop up window to appear showing the full details for the station.

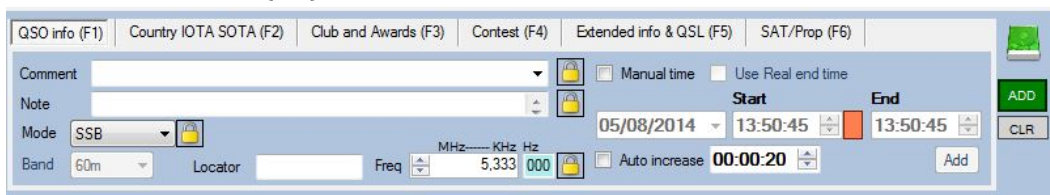


Selecting ClubLog from the settings menu causes the information from ClubLog call exceptions list (CEL) to be entered into the QSO fields of any call that appears in the downloaded CEL.



Clicking on the ClubLog icon will open a popup similar to the SCL popup showing all the Clublog CEL information.

## QSO Information (F1)



The user can add a comment to the QSO or set the Band, Mode and Frequency.

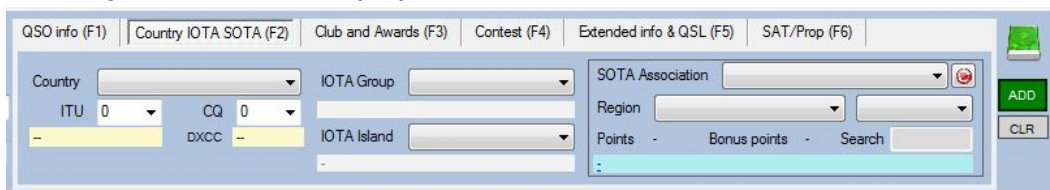
The look up data is taken, when available, from the external lookups (HAMQTH or QRZ.COM).

Band, Mode and frequency are taken automatically from the radio if the CAT connection is active. For digital modes, the radio does not report the method used (PSK, RTTY, etc.), therefore, the user must select the mode from the mode drop down menu.

### TIP

The user can 'Tab' between QSO fields and type information into the fields. Pressing 'Enter' (return) on the keyboard will add the updated QSO, thereby saving time when operating a pile up or in a contest.

## Country & IOTA - SOTA (F2)



This window contains detailed information about the country, IOTA & SOTA for the call sign. This information is downloaded from QRZ.COM or HAMQTH.com, or inserted manually by the user.



## Club and Awards (F3)

Entry tab for club ID's and awards data

## Contest info (F4)

It is possible to display basic information relevant to the current contest when using LOG4OM during a contest. (See screen above) The exchange can be incremented automatically for each new QSO and the exchange sent is displayed in the 'SENT' field as above. The received exchange must be entered manually.

It is possible to limit the lookup of the names in the log to the fields required for the contest. Call signs worked are checked against the database for duplicates. Before the contest, select the option 'Search previous QSO's in this contest only' this will ensure that, even if a station has been worked in a previous contest and the call exists in the logbook, it will still appear as a new contact for the current contest.

The field Contest ID allows the user to indicate in the log the name of the contest to which the QSO refers. This option allows the user to export correctly in a CABRILLO report file the information required for the contest organiser.

## Extended info & QSL (F5)

This screen shows the relevant information for the county, state and QTH data, plus QSL and antenna information

The relevant information is added automatically for each QSO according to the lookup selections made.

The information QSL VIA is taken from an external source but it can be modified manually.

## Power

QSO info (F1) | Country IOTA SOTA (F2) | Club and Awards (F3) | Contest (F4) | Extended info & QSL (F5) | SAT/Prop (F6)

County: [ ] Send QSL: N - no QSL Via: JF3PLF OQRS->No LOTW- Antenna Elevation: 0

State./Pref.: [ ] Send via: [ ] Address: Christmas Island Antenna Path: S - Short

QTH: [ ] QSL Message: [ ] Antenna Bearing: 84

Power: 100.000 [ ] info [ ]

ADD CLR

The power (Watts) being used for the QSO can be changed as detailed above.

## Sat/Split Mode (F6)

QSO info (F1) | Country IOTA SOTA (F2) | Club and Awards (F3) | Contest (F4) | Extended info & QSL (F5) | SAT/Prop (F6)

Enable SAT Mode

Mode: FM Satellite: [ ] Propagation: [ ]

RX Band: 20m Freq RX: 0.000 MHz

ADD CLR

In this view it is possible to modify and add details of a satellite QSO or work on split frequencies.

## Main Window

### QSO Information (F7)

The screenshot shows the Log4OM software interface. The main window is titled 'Log4OM [User Profile: Test setup]'. The 'QSO Information (F7)' window is open, displaying a table of QSO records. The table has columns for Date, Start, Callsign, Band, Frequency, Mode, Sota Ref, Sent, Rcvd, Name, DXCC, and Country. The records are as follows:

Date	Start	Callsign	Band	Frequency	Mode	Sota Ref	Sent	Rcvd	Name	DXCC	Country
04/11/2013	10:12:42	LA0HK	15m	21,004.400	CW		599	599	Gery	266	Norway
03/11/2013	06:27:04	LA0HK	20m		SSB		59	59	Gery	266	Norway
18/04/2009	07:01:57	LA0HK	40m	7,130.000	SSB		59	59	Gery	266	Norway

Below the table is a world map showing Norway highlighted. To the right of the map is a 'Bands and Modes' panel for Norway, showing worked bands (W) and confirmed bands (C) for various frequencies:

Band	PH	CW	DIG
160m	W		
80m	C		C
60m			
40m	C		
30m			
20m	C		C
17m	C		
15m		W	
12m			
10m			
70cm			

The interface also shows a 'Callsign' field with 'LA0HK' entered, a 'Band' of '15m', and a 'Frequency' of '21,295.000'. The 'QSO Information (F7)' window is divided into three sections: a table of QSO records, a world map, and a 'Bands and Modes' panel.

Enter the call of a previously worked station or double click on a cluster spot (lower right hand of screen) to enter the call in the CALLSIGN window. Press F7 to display a map giving the location of the station entered. A panel opens to the right of the map showing bands and modes worked relevant to the country entered.

The QSO Information (F7) is divided into three sections.

### Worked Before

The 'Worked Before' pane near the top of the screen can be detached for viewing on a second monitor. To do this, click the icon 'Detach Grid', just above the map.

### World Map

A world map shown under the 'Worked before' window, indicates graphically the position of the DX station.

### Country/Band Worked before grid

On the right of the Grey line map is a 'Bands and Modes' panel, which indicates the bands and modes that have been worked (**W**) or Worked and Confirmed (**C**) by LOTW or QSL card for the country of the call entered in the call-sign entry field.

## Beam Heading and information

Information relating to the beam heading (short path/Long Path), Distance, Locator, IOTA and personal data can be viewed above the cluster display on the right hand side of the map.

The values of distance and bearing are calculated from the QRA locator of the station or, if it is unavailable, the centre of the country.

Click on the 'LOOKUP' button and/or the 'PERSONAL WEBSITE' button to open a web site window in the built in browser (F11). The DX station must have supplied the relevant information to their profile in HAMQTH.com or QRZ.COM and/or their personal URL for this feature to work.

## Cluster display

Under the detail pane is a cluster window that is a smaller version of the main cluster display.

Double clicking a spot enters the call into the QSO input field and, if rig control is in operation, automatically changes the frequency and mode of the radio.

## Recent QSOs (F8)

Date	Start	Callsign	Band	Frequency	Mode	Sota Ref	Sent	Rcvd	Name	DXCC	Country
12/07/2014	06:58:28	F1RUC	17m	18,118.500	SSB		59	59		227	France
12/07/2014	06:56:36	G6YYY	17m	18,118.500	SSB		59	59		223	England
12/07/2014	06:53:11	G4RRT	17m	18,118.500	SSB		59	59	AJ WOOD	223	England
12/07/2014	06:51:03	G1HMF	17m	18,118.500	SSB		59	59	B RUDKIN	223	England
27/06/2014	09:52:27	F4GFE/P	40m	7,070.000	SSB		59	59	Patrick MENARD	227	France
27/06/2014	08:06:58	AM07SS	20m	14,084.000	JT65C		0	0	D. Felipe de Borbón a...	281	Spain
27/06/2014	08:06:34	EA1VE/P	40m	7,085.000	SSB		59	59	Jon Iradi	281	Spain
26/06/2014	22:07:39	R3RCC/1	20m	14,030.900	FMH...		599	599		54	European Russia
26/06/2014	22:06:43	CT1FIU	20m	14,070.500	PSK31		599	599	Paulo Matos	272	Portugal
26/06/2014	22:06:18	EV1P	20m	14,071.700	JT65A		0	0	Vladimir (Mad) Polysaev	27	Belarus
26/06/2014	22:05:35	R3RCC/1	20m	14,030.900	CW		599	599		54	European Russia
23/06/2014	15:01:46	DG5WU	20m	14,290.000	SSB		59	59	Jana Winkler	230	Fed. Republic of Germany
23/06/2014	14:48:20	DG5WU/P	20m	14,280.000	SSB		59	59	Jana Winkler	230	Fed. Republic of Germany
30/05/2014	08:24:28	SV20XS	80m	3,781.000	SSB	SV/TL-059	59	59	Christos Tzioutzias	236	Greece
24/05/2014	09:19:00	TF2MSN	17m	18,103.711	JT65		-07	-07	Odinn	242	Iceland
22/05/2014	09:44:00	NE2U	20m	14,076.512	JT65				George B Holubec	291	United States
08/05/2014	09:07:04	HB9BIN/P	20m	14,021.000	CW	HB/AG-013	599	599	Juerg Dr. REGLI	287	Switzerland
07/05/2014	09:24:07	K7PT	80m	3,781.000	SSB		59	59	chuck	291	United States
02/05/2014	09:33:37	G3YWA	12m	24,917.000	SSB		59	59	Ted Pepper	223	England

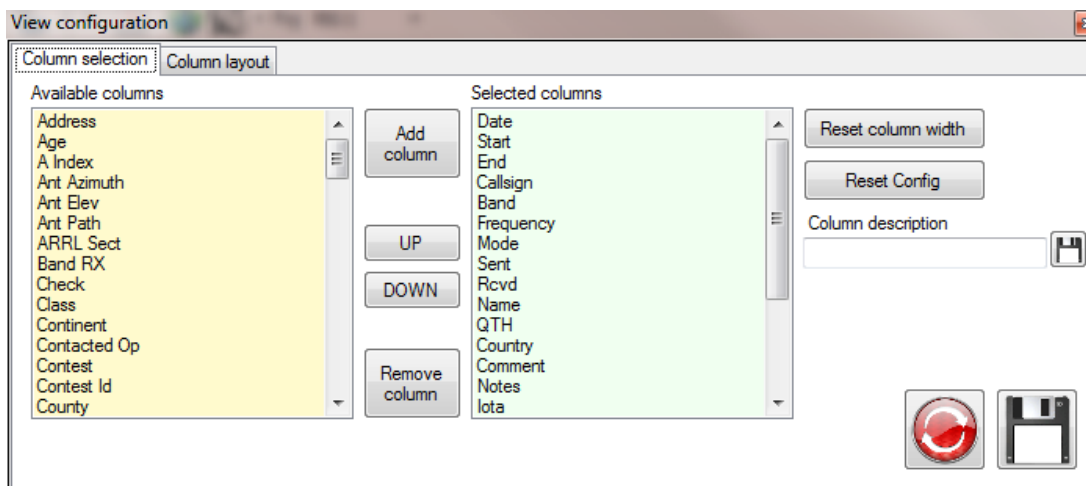
Layout Refresh Search Parameters Records found: 4941 Detach Grid Search limit count (0 = all) 6000

## Column Layout - Titles - Width

The user can configure the column layout and width for all displays by selecting the 'Layout' button at the bottom left of each screen.

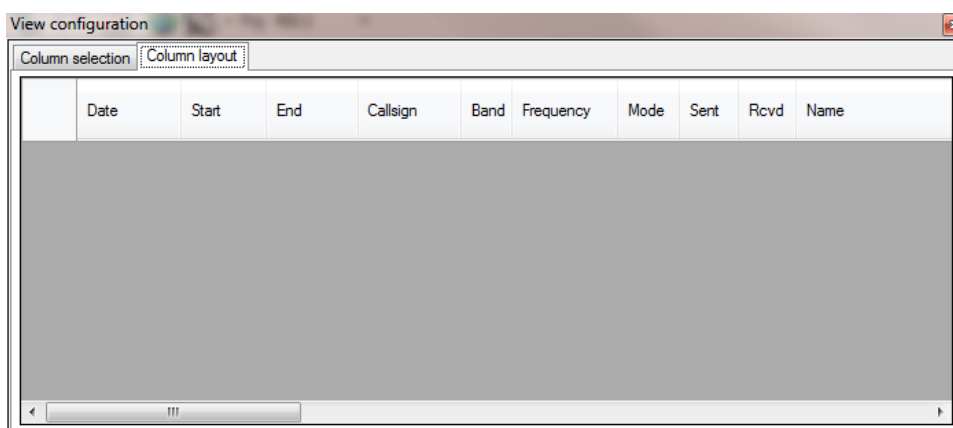
EI80IRTS	12/05/2012	16:15:47	40m	SSB	Ireland
GS3PYE/P	03/05/2012	13:33:21	40m	SSB	Scotland
G3RFX	29/04/2012	07:43:27	80m	SSB	England
G4TRN	08/04/2012	07:45:11	80m	SSB	England
G8GMU	08/04/2012	07:37:51	80m	SSB	England
G4DYU	08/04/2012	07:35:07	80m	SSB	England
G7JMZ	08/04/2012	07:28:29	80m	SSB	England
I10IDP	09/03/2012	08:58:33	40m	PSK31	Sardinia
G3VOT	07/03/2012	19:55:44	80m	SSB	England
G3PYI	11/02/2012	09:17:45	80m	SSB	England
G3PYI	10/02/2012	09:29:22	80m	SSB	England

Layout Refresh Search Parameters Records found: 3335



Select the required fields (columns) from the left pane and click the 'Add Column' button. The selected columns can be moved up and down to change the column order.

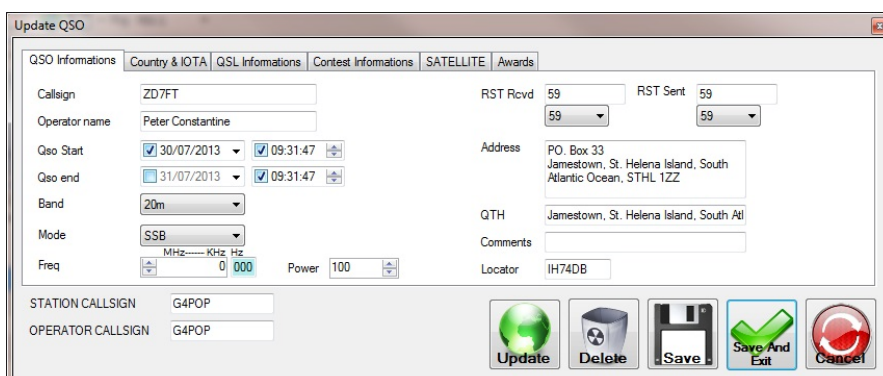
The titles may be changed by selecting the field from the right hand column and editing it in the 'Column Description' window followed by clicking the save icon to the right of the field.



To adjust column width, click on 'Layout', then select 'Column Layout' tab and adjust the column width. **Press 'Column Selection' tab and press 'SAVE'.**

## Editing an existing QSO

Double clicking on a log entry in the 'Recent QSOs' window will open the Update QSO window.



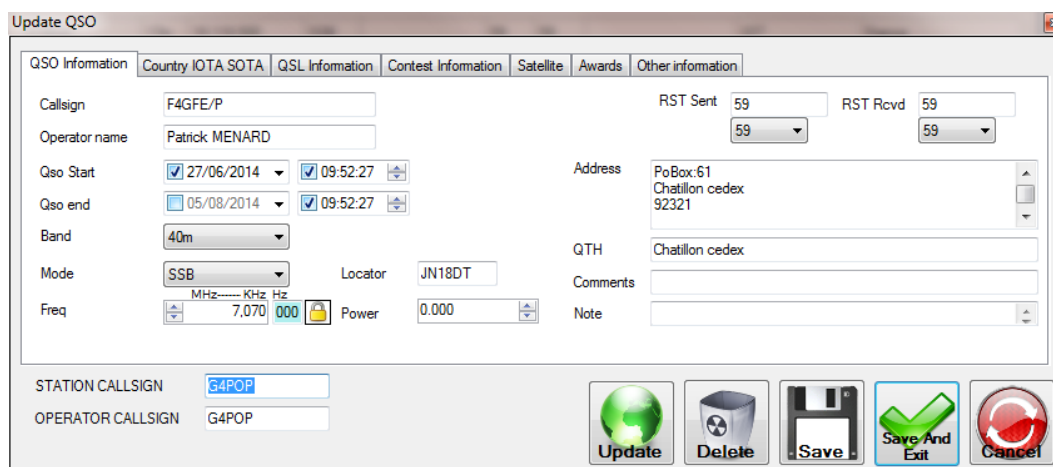
Modifications to an existing QSO can be made in this window. The record can be updated by clicking the green 'Update' button. This will supply data from QRZ or HamQTH depending on the selection in the settings menu. Then click 'Save' to update the QSO in the logbook.

To delete the QSO, click 'Delete'.

### Searching the 'Recent QSO' (F8) window.

A search facility is provided in the 'Recent QSO (F7)' window for fast searching and editing of individual QSOs. To access the search facilities click the 'Search Parameters' button at the bottom of the 'Recent QSO (F8)' window.

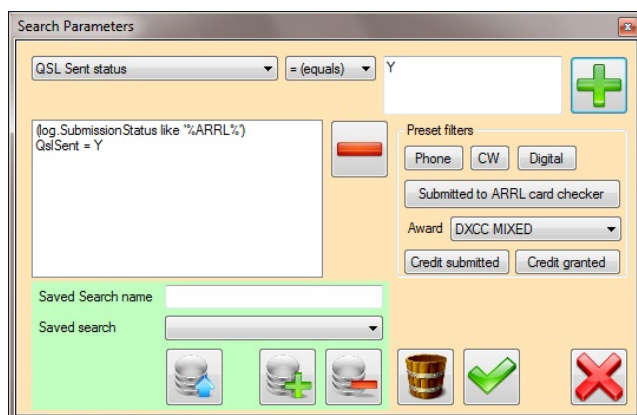
Double clicking one of the filtered QSOs in the F7 'Recent QSO' window provides an 'edit' window to update the data for the selected QSO.



### Search Parameters (Filters)

The powerful search facilities provided in LOG4OM enable the user to filter the logbook for specific data.

To begin a search, click the 'Search Parameters' tab at the bottom of the screen and the following window will open.



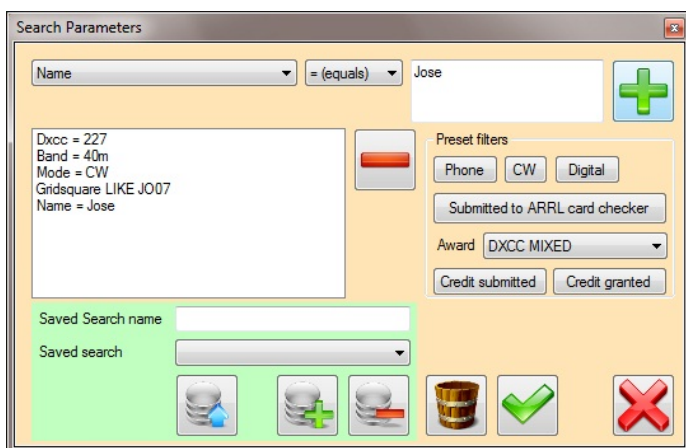
Several pre-set search filters are provided on the right hand side of the screen. The selection of a pre-set search filter will automatically add the chosen search parameters to the working list on the

left. The example above shows the filter parameters of a search for cards sent to the DXCC Card checker.


The sequence for this is as follows:


1. Press 'Submitted to ARRL card checker'.
2. Select 'QSL Sent status' from the drop down menu in the 'Search Parameters' screen.
3. Enter the letter Y (for yes) in the top right window.
4. Press the Green plus button.
5. Press the Green tick/check button.
6. Press the 'Search' button in the main window.

It is possible to construct a very refined search by adding several search parameters to the working list e.g. All the French stations worked on 40 meters CW in Locator square JO07 with an operator named Jose!






### Adding search parameters

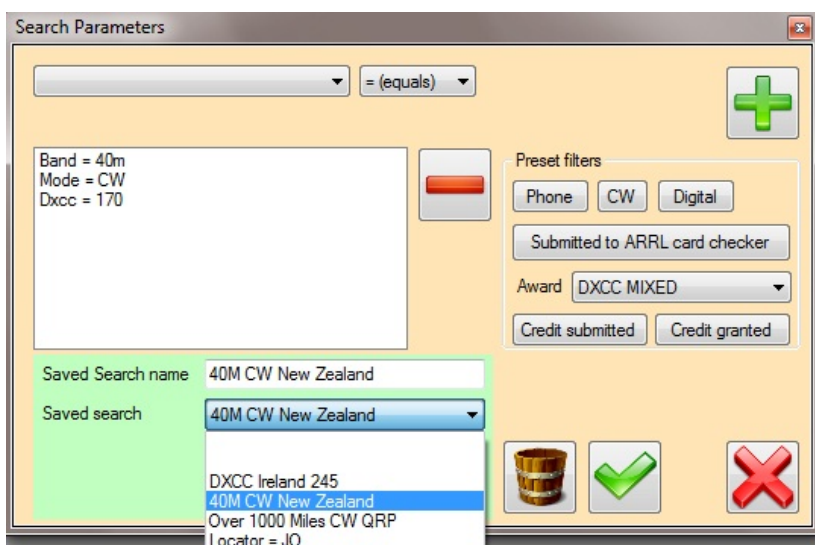
1. Select the field to be searched from the drop down list at the top left of the window.
2. Select the logical operator from the centre list (= (equals), > (More than), Like (Starts with) etc.).
3. Enter a value in the field window on the right.
4. Click the  button

When the search parameters have been completed, click the  button to revert to the main archive window and then, click the 'Search' button.

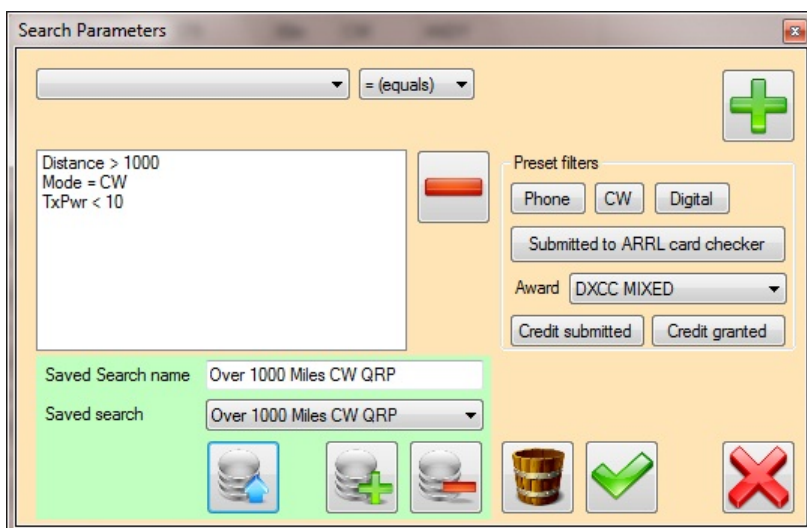
### Saved searches

To save a user defined search for later use.

1. Enter a suitable search title in the 'Saved Search name' field and then click the  button to save.
2. Saved searches can then be recalled by selecting from the 'Saved Search' list and clicking the  button.
3. To remove a 'Saved Search' from the list, select the search to be deleted and then click the  button.



### Saved search list



### Saved search loaded from list

There are several pre-set filters for the more frequently used searches. These are on the right hand side of the 'Search Parameter' window. Clicking on one of the pre-set searches adds the search parameters to the list on the left hand side. –

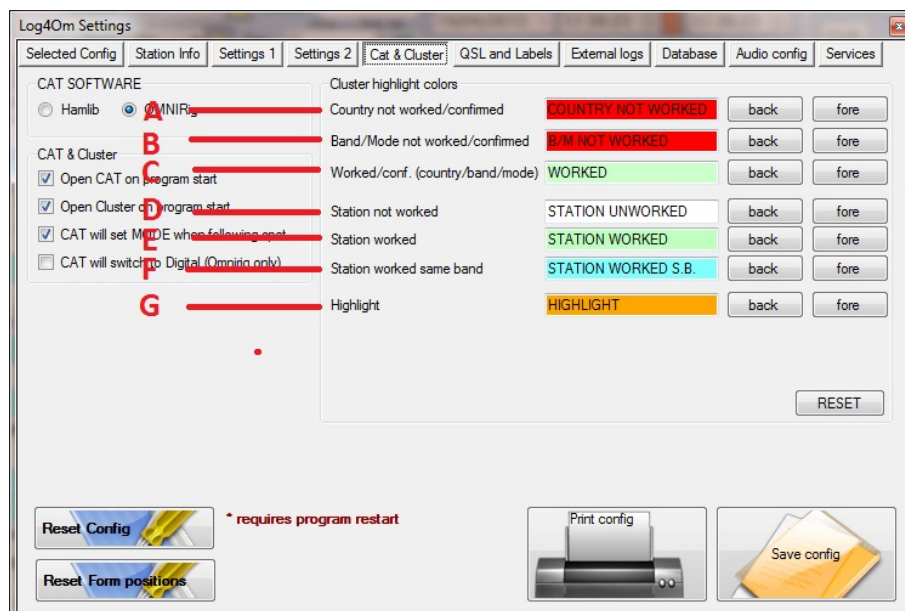


## Cluster (F9)

### Cluster colours

The cluster colours can be set in the Options/Cat & Cluster tab by selecting the colours of choice for the background (Back) and Text (Fore)

Please note the colours shown are the editors colour scheme the default colours are different.



These colours are applied to the fields as shown in the screenshot above.

A = The country has not been worked/confirmed on any band.

B = The country has not been worked/confirmed on the band or mode that the spot is on.

C = The country band and or mode have been worked/confirmed

D = The Station spotted has not been worked

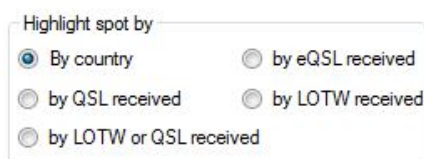
E = The station spotted has been worked on another band

F = The station spotted has been worked on this band.

G = Highlights any custom spots selected by the custom filter.

### Worked/confirmed filtering

The chosen cluster colours are applied to the five different spot filter views selected from the 'Highlight spot by' menu.



### Filter 'By country'

If this filter is chosen the following filter results illustrate the country 'Worked' status.

0645Z	SU9AF	Egypt	14155.0	TNX 73 5/5	20m	PHONE	EA3CZV
-------	-------	-------	---------	------------	-----	-------	--------

In the screen shot above the country has not been worked on any band or mode.

0649Z	GB2GM	England	14177.0	marconi special call	20m	PHONE	
-------	-------	---------	---------	----------------------	-----	-------	--

This graphic indicates that the country has been worked on this band and mode.

0652Z	4X4DZ	Israel	21017.9	F12HS	15m	CW	
-------	-------	--------	---------	-------	-----	----	--

Israel has been worked with CW but not on this band (15m).

0652Z	VK7JB	Australia	14040.0		20m	CW	
-------	-------	-----------	---------	--	-----	----	--

The screen shot above shows that Australia has been worked on this band but has not been worked using CW. – The time highlighted in red indicates that the station is an LOTW user.

### Filter 'By QSL received'

If this filter is active the same cluster spots indicate the confirmed status.

0645Z	SU9AF	Egypt	14155.0	TNX 73 5/5	20m	PHONE	EA3CZV
-------	-------	-------	---------	------------	-----	-------	--------

In the graphic above the country has not been confirmed by a QSL card on any band or mode.

0649Z	GB2GM	England	14177.0	marconi special call	20m	PHONE	
-------	-------	---------	---------	----------------------	-----	-------	--

This graphic indicates the country has been confirmed by a QSL card on this band and mode.

0652Z	4X4DZ	Israel	21017.9	F12HS	15m	CW	
-------	-------	--------	---------	-------	-----	----	--

In this shot Israel has been confirmed by a QSL card on CW but not on this band (15m).

0652Z	VK7JB	Australia	14040.0		20m	CW	
-------	-------	-----------	---------	--	-----	----	--

The screen shot above shows that Australia has been confirmed by a QSL card on this band but has not been confirmed in CW.

Similar results are displayed when the other filters are selected to display the confirmed status by eQSL, LOTW or a combination of LOTW and paper QSL cards.

### Call sign highlighting.

0649Z	GB2GM	England	14177.0	marconi special call	20m	PHONE	
-------	-------	---------	---------	----------------------	-----	-------	--

The call sign GB2GM is highlighted Green because this station has been worked but on a different band.

0654Z	<b>E51JD</b>	South Cook Is.	14266.0		20m	PHONE
-------	--------------	----------------	---------	--	-----	-------

In this image the station E51JD South Cook Island has been highlighted blue because it has been worked on this spots band and mode.

### Time Highlighting

<b>0700Z</b>	<b>VK2GWK</b>	Australia	18147.0	trx henk 5/5-73!	17m	PHONE
--------------	---------------	-----------	---------	------------------	-----	-------

The time highlighted in red indicates that the station is an LOTW user.

### Unworked mode on spot band

When the box indicated is checked the mode will be highlighted if the country has not been worked/confirmed in the mode on the spot band, this easily identified required modes.

Time	Callsign	Country	Frequency	Note	Band	Mode	Reporter	Other
0845Z	NL8F	Alaska	14265.0		20m	PHONE	2W0VOW	
0846Z	SV3/ON4LO/P	Greece	21260.0	trx 59 73 Joe	15m	PHONE	G00JG	
0841Z	SV3/ON4LO/P	Greece	21260.0		15m	PHONE	GM7TUD	
0655Z	YY2GAL	Venezuela	7180.0		40m	PHONE	G0MMI	
0646Z	SU9AF	Egypt	14002.0	strong	20m	CW	G4POP	
<b>0616Z</b>	<b>RV3YR</b>	European Russia	14230.0	TNX 595.VICTO...	20m	PHONE	2M0WEV	
0602Z	WP4NFF	Puerto Rico	7088.0	trx jeol 73s	40m	PHONE	G0RBD	
0540Z	4A8DMR	Mexico	3793.0	cq dx	<b>80m</b>	<b>PHONE</b>	G3LNP	
<b>0522Z</b>	<b>K5WW</b>	United States	7078.0	had you but SSB ...	40m	PHONE	G7CNF	
<b>0512Z</b>	<b>WB2YDS</b>	United States	7078.0	TU JT9 QSO GL ...	40m	PHONE	G7CNF	
<b>0347Z</b>	<b>WP3UX</b>	Puerto Rico	5403.5	trx	<b>60m</b>	<b>PHONE</b>	G4UFK	
0346Z	PJ4/SP9FIH	Bonaire Is.	3799.0	cq	<b>80m</b>	<b>PHONE</b>	G3LNP	
0258Z	VP9NI	Bermuda	5403.5	trx John	<b>60m</b>	<b>PHONE</b>	G4UFK	
2307Z	4A8DMR	Mexico	14086.0	RTTY	20m	<b>DIGITAL</b>	M0PZT	
2307Z	YV5OSW	Venezuela	7188.0	Trx Ozz-73 Geoff...	40m	PHONE	G80FQ	
<b>2304Z</b>	<b>N9AVY</b>	United States	14070.0	THANKS JERRY...	20m	<b>DIGITAL</b>	G6CHD	
2249Z	PR8RF	Brazil	7176.3	Trx Francisco-73...	40m	PHONE	G80FQ	
2228Z	A61DJ	United Arab Emir...	7040.6	psk31 tks Obaid	40m	<b>DIGITAL</b>	G70GX	
2220Z	5P4MG	Denmark	7181.0	EU-171 DENMA...	40m	PHONE	G1TDN	2213Z C EU-171
2213Z	HP2SM	Panama	18075.0		17m	<b>CW</b>	MU0FAL	
2202Z	IT9/DL4KM	Italy	14274.0	cqcx 20	20m	PHONE	M6TET	

Filters Custom Statistics

All modes  Lo TW users

CW

Digital

Phone

Remove wrkd country


Keep unworked bands

Unworked mode on Spot band

Band:

Link to ... and

Link to ... Mode  Ext. view



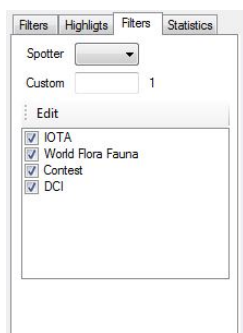
Time	Call sign	Country	Frequency	Note	Band	Mode	Reporter	Rank
1104Z	T88AT	Palau	10105.5		30m	CW	W9MO	132
1103Z	EA4IF/P	Spain	7107.0	CQ CQ / MSTD 078 / DME 4503	40m	PHONE	EA4APP	337
1102Z	VP5/W5CW	Spain	7107.0		20m	CW	RN2FQ	249
1103Z	ZS3Y	Republic of South Africa	28443.0	trnx Good DX 10m	10m	PHONE		
1103Z	GB5PT	England	14250.0	59 trnx JOHN	20m	PHONE	IZ0TTE	330
1102Z	OK1NR/P	Czech Republic	10117.6	cq sota ok/kr-073	30m	CW	OK1ZE	323
1102Z	YO6CFB	Romania	21075.3	trnx for 4 band	15m	DIGITAL	DH7LF	312
1101Z	SU9AMO	Niger	24891.0		12m	CW	ON7CD	109
1101Z	SV8PKH	Greece	14082.0		20m	DIGITAL	SV8PKH	318
1101Z	PD7BZ	Netherlands	28120.8	trnx QSU	10m	PHONE		
1100Z	SQ5GLB/6	Poland	7155.0	wca dpp09	40m	PHONE	SP3QFV	333
1101Z	OY1DZ	Faroe Is.	28120.8	TU Karstin for Faroese 73's	10m	PHONE	PD7BZ	234
1101Z	F6KUF/P	France	28038.0	EU-064	10m	CW	DL4CW	335
1100Z	F5RHD/P	France	28450.0	CQ DFCF 62113	10m	PHONE	F5RHD	335
1100Z	R6LBC/3/P	European Russia	7040.0	ETPA	40m	DIGITAL	UA3GX	336
1100Z	W1KOK	United States	18072.0	still here? I need VT!	17m	CW	EA3NT	340
1100Z	F8EEQ	France	7093.0	59-090	40m	PHONE	F4VOT	335
1100Z	TJ3AY	Cameroon	28480.0	5/9	10m	PHONE	PY2JDS	131
1100Z	A35JP	Tonga	10101.5		30m	CW	N4ABN	99
			14042.0	EAtest AV			KO1U	337
			28026.1				PE2K	331
							F0GWN	335
1059Z	OK1NP	Czech Republic					IZ8YWB	323
1058Z	SH15	Egypt	24891.0	trnx 57 madrid	12m	CW	EC4DEX	176
1058Z	EI11/P	Ireland	14255.0		20m	PHONE	EA7ANV	306
1118Z	CO8LY	Cuba	18081.0	qsl via EA7ADH (only direct)	17m	CW	CO8LY	231
1057Z	A61ZX	United Arab Emirates	21074.4	psk63 contest	15m	DIGITAL	ON7SS	265

**Annotations:**

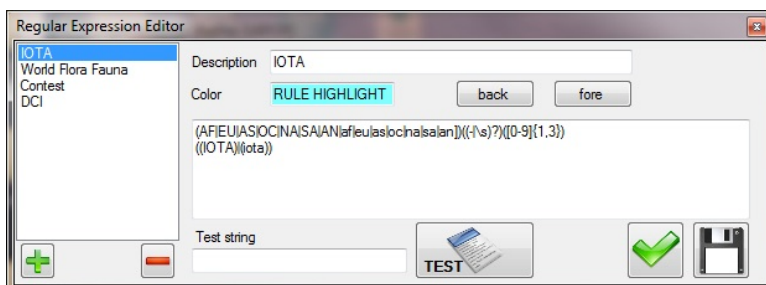
- Station worked on another band:** Points to VP5/W5CW (Spain) on 20m CW.
- Country not worked on this band with phone:** Points to ZS3Y (South Africa) on 10m PHONE.
- IOTA spot - Filter is set:** Points to EU-064 (France) on 10m CW.
- Country has been worked on phone but not on this band:** Points to PD7BZ (Netherlands) on 10m PHONE.
- 99th in the Most Wanted list!:** Points to A35JP (Tonga) on 30m CW.
- Station worked on this band:** Points to SH15 (Egypt) on 12m CW.
- Country not worked on any band or mode:** Points to EI11/P (Ireland) on 20m PHONE.

### Custom filters

When any of the 'Custom filters' is applied by checking a filter box the relevant selection is highlighted.



Filters may be added or customised by clicking the 'Edit' button



Highlighting is applied to any matching spot as shown in the graphic below.

0707Z	OZ/PA1H	Denmark	7183.0	Trx qso, 73.	40m	PHONE	IK0ZMK	314	0700Z IZ0JJC: IOTA EU 088 OZFF 001 0657Z IN3HOT: EU-088
-------	---------	---------	--------	--------------	-----	-------	--------	-----	--

This indicates that the Danish island EU-088 has already been worked and/or confirmed on 40m Phone.

### Most wanted DXCC

Log4OM includes the Clublog list of most wanted DXCC entities and the rank of each country appearing in the cluster is shown in a separate column as shown below.

Time	Callsign	Country	Frequency	Note	Band	Mode	Reporter	Rank
0709Z	C91RF	Mozambique	24891.0	up 1	12m	CW	YO2BBX	159
						PHONE	UA9O	336
						PHONE	G0JEI	337
0708Z	R27SAT	European Russia	14178.0	CQ CQ	20m	PHONE	RA4SCJ	336
0708Z	F51YU/P	France	7127.0	FFF-026	40m	PHONE	EC5BYB	335

**Clublog DXCC Most wanted rank column**

The top 100 most wanted are highlighted as below.

EA2EEK/P	Spain	7079.0	vghi 088	40m	PHONE	EA2DP	337
ZK3N	Tokelau Is.	21262.0	hard ...				45
BD3IAQ	China	21300.0		15m	PHONE	UX6IZ	260

Right click on a spot to display in a selected screen the last 15 comments posted on the cluster relating to that particular spot.



### Extended View

Checking the 'Ext. View' check box as shown below extends the cluster window to display the status of all methods of QSL and the country worked status in a grid format.



## Alerts

### **Introduction.**

Log4OM provides user definable DX Cluster spot alerts triggered by a:

Call sign

Unworked Country

Required EQSL, LOTW or QSL

Required QSL & LOTW

Wanted IOTA

Band

DXCC Country

Mode (Phone, DW & Digital)

Band & Mode

Spotter Call

Spotter Continent

Continent Etc.

These alerts effectively provide a 'Whiteboard' outside of the normal Log4OM filters, which enables the user to be alerted if a friend's call is spotted on the cluster, although the friend's country may be filtered out of the normal incoming cluster spots.

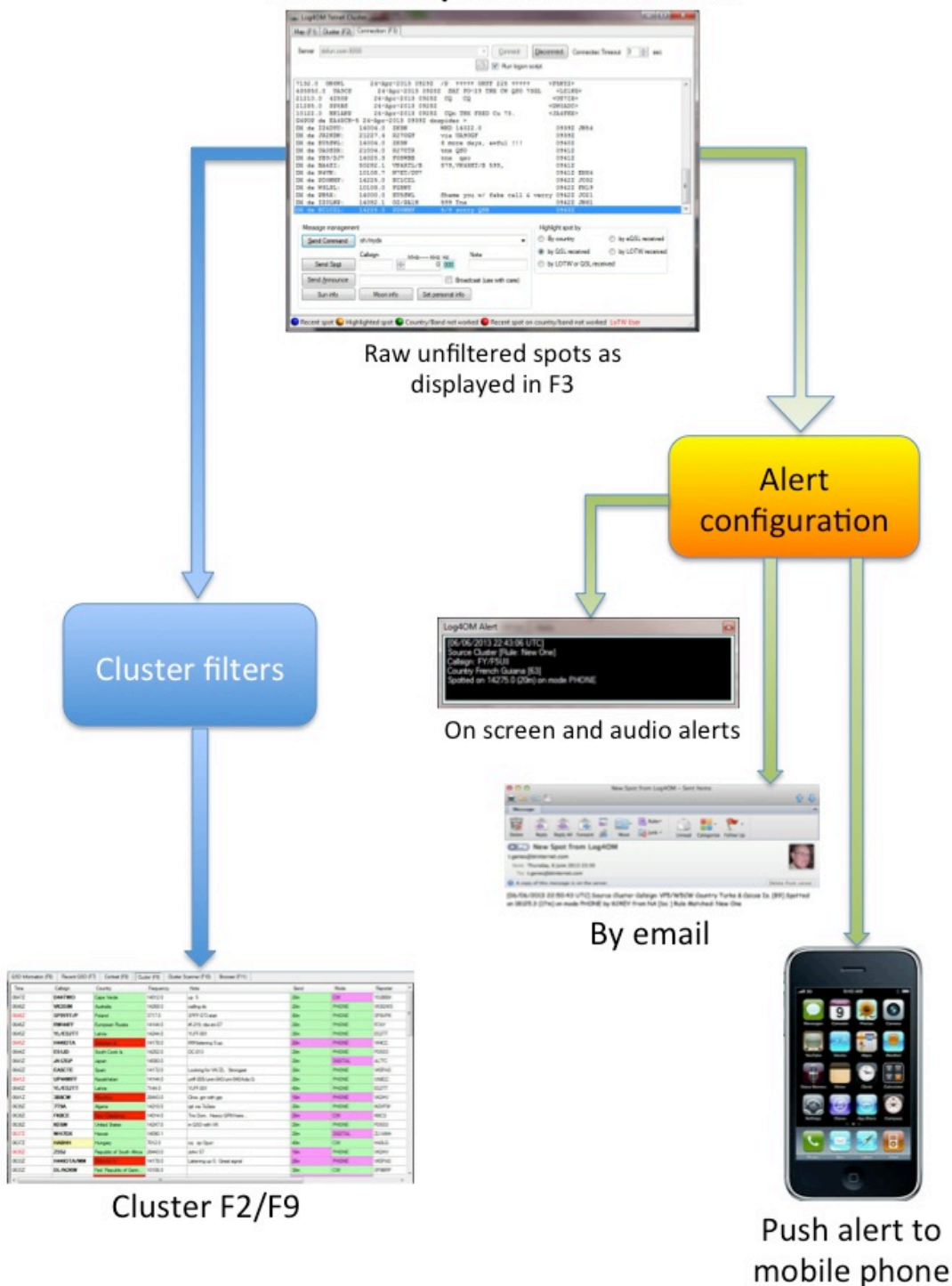
e.g. The normal cluster filters may be set to only show unworked countries and although the user may have worked the USA on many occasions he could still want to be alerted when an American friend's call was spotted. In this instance the user would set an alert for the specific call sign of his friend and leave all other choices blank.

The alerts can be combined to provide finely filtered alerts:

e.g Alert for a specific call sign in Brazil on 15 meters CW or Digital mode spotted by a European station.

The flow chart on the next page illustrates that the alerts are not affected by the cluster filters and therefore provide a separate filtering.

### DX Cluster Spots and Alerts Flow

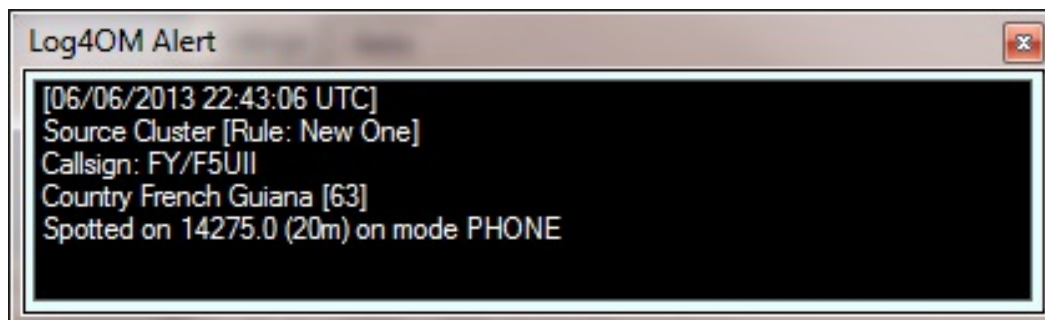




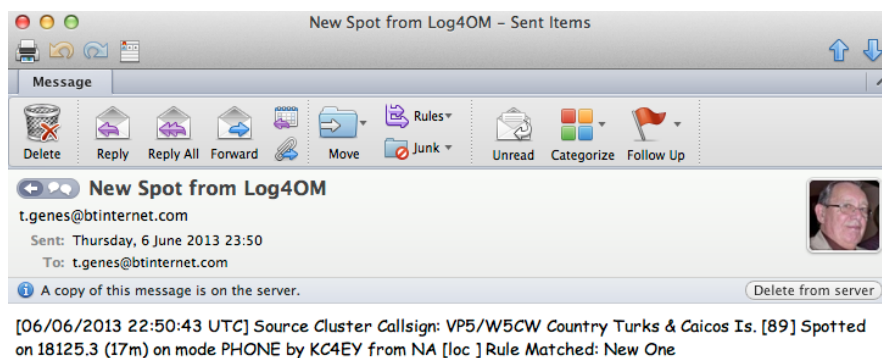
## Types of Alert

When an incoming DX Cluster spot triggers an alert, a notification is sent either by:

### Log4OM on-screen alert.



### Email



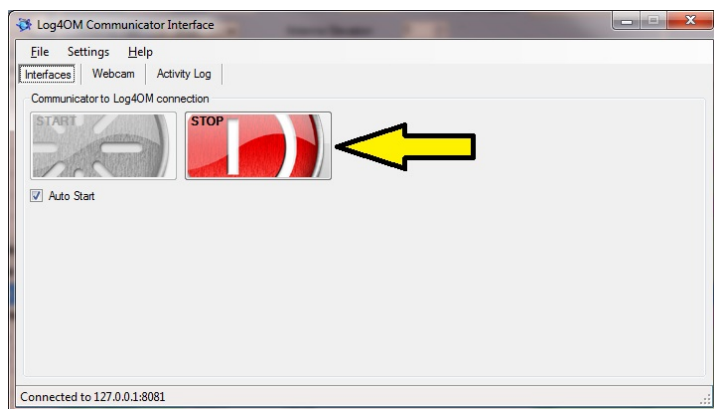
**Push message** - To a mobile phone or another computer by using Growl for Windows



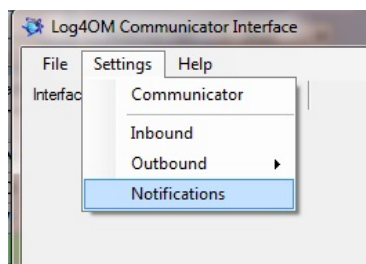
Growl also provides on screen and audible alarms

Any one or a combination of all three methods can be selected.

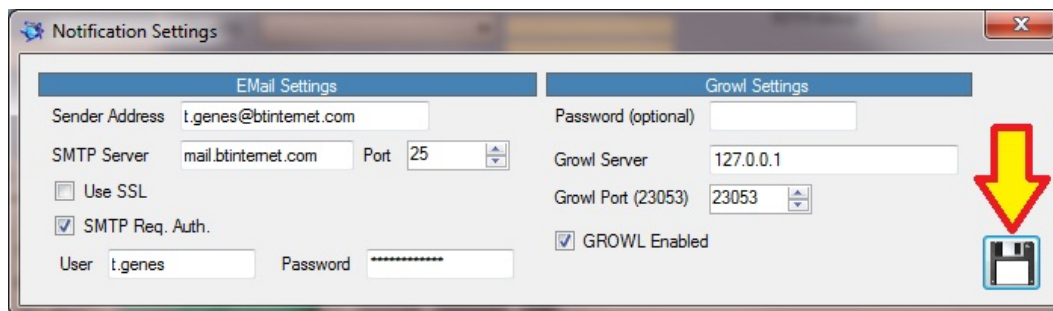
## Setting up Log4OM alerts Communicator



Open the Communicator and stop the service.

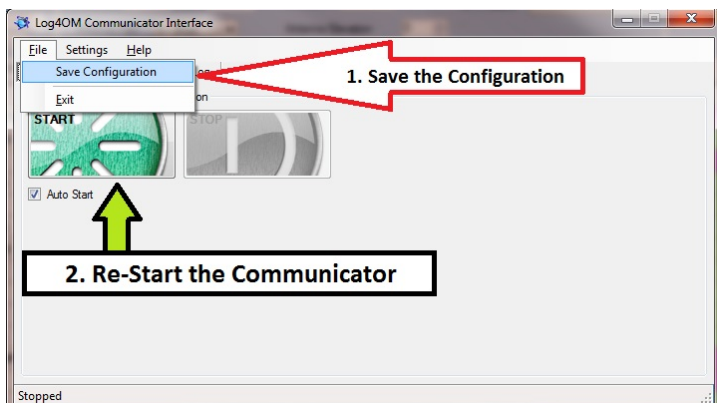


Select 'Notifications' from the settings menu to setup communications for the notifications (Alerts)



Insert the information for the outgoing email connection and also Growl if notifications to a mobile phone or another computer are required.

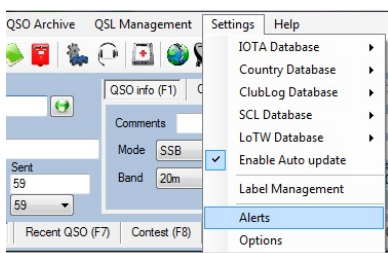
When finished click the 'Save' button indicated by the arrow.



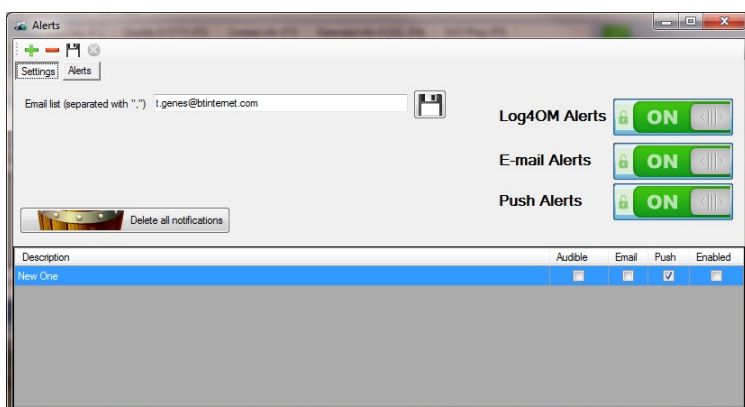
- Save the configuration
- Restart the Communicator
- **Minimize** the Communicator window – **Do not close it!**

## Configuring Alerts

Open the alerts configuration window via Settings/Alerts

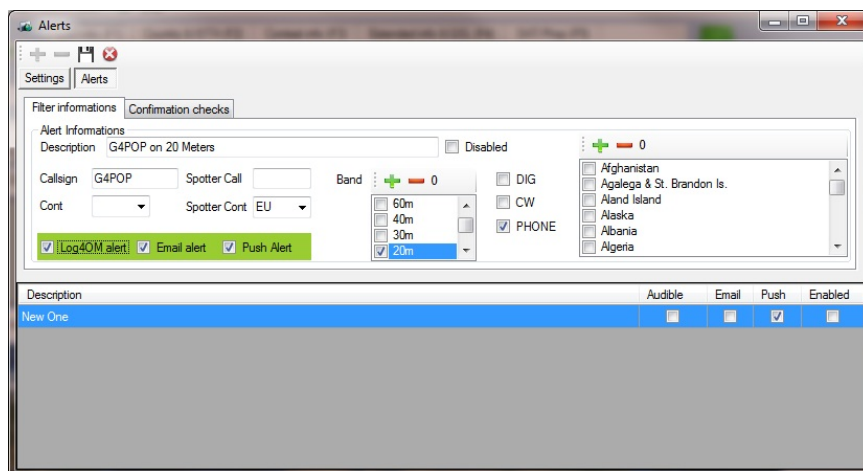


1. Enter the destination email address or addresses.
2. Click the 'Save' button.
3. Switch on the alerts required by using the slider switches to the right of the window.



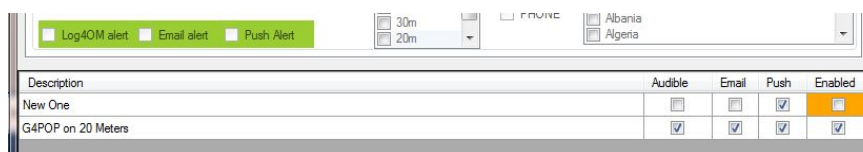
4. Click the 'Alerts' button at the top of the window.
5. Click the green plus (+) sign at the top of the window.
6. Enter a meaningful name in the 'Descriptions' field, e.g. 'G4POP on 20 Meters'

7. Enter the desired call sign (e.g. G4POP)
8. Select the spotter area (e.g. EU)
9. Select the required band (e.g. 20m)
10. Select the mode required (e.g. Phone)
11. Check the type(s) of alert(s) to be sent
12. Click the save icon at the top of the window



In the example above an alert will be triggered if a spotter in the EU spots G4POP on 20m Phone.

When saved the alert will appear in the alert list.



Similar alerts can be configured in this window for countries on particular bands and modes.

Please note:

If no bands are checked this = All bands selected.

If no countries are checked this = All countries selected.

The plus sign (+) above the countries and band lists if clicked will check every country or band.

The minus sign (-) above the countries and band lists if clicked will deselect every country or band.

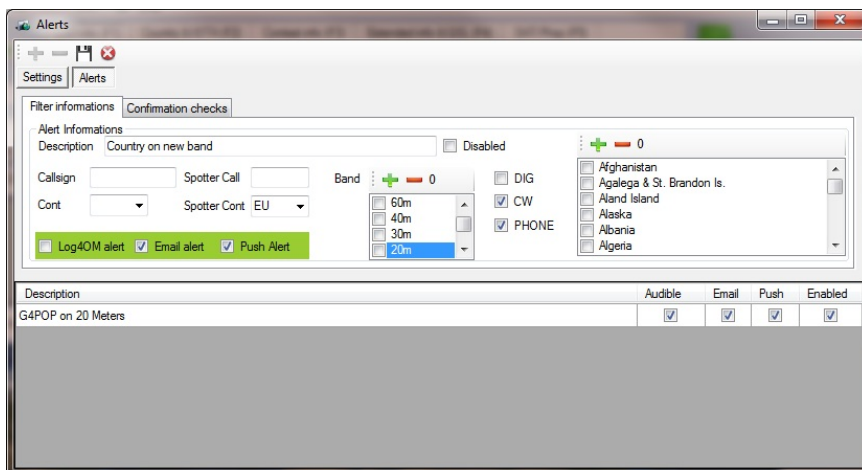
The number shown above the countries and band lists indicates how many countries or bands are selected.

## Alerts for wanted Countries or Confirmation

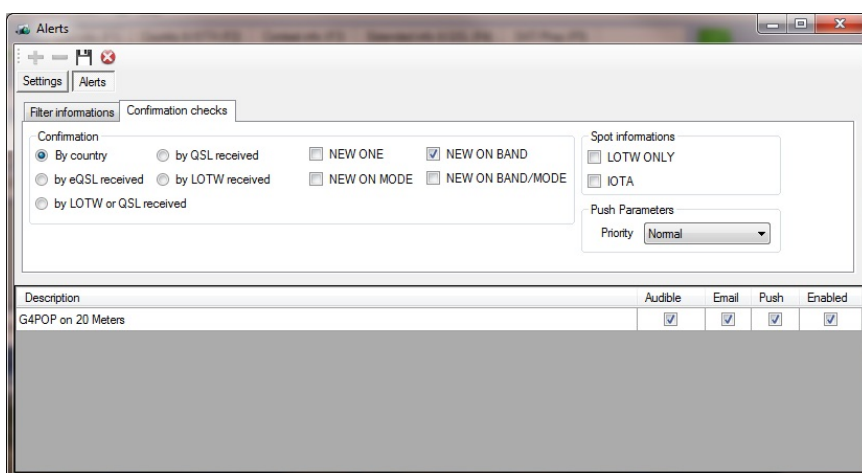
These alerts are pre-set alert filters based on the countries a user has worked and the confirmations he has received.

In the Confirmation tab of the alert screen the user can set an alert for New countries, Countries on a new band or mode, IOTA activations etc.

Here is an example of setting up an alert for a country on a new band:

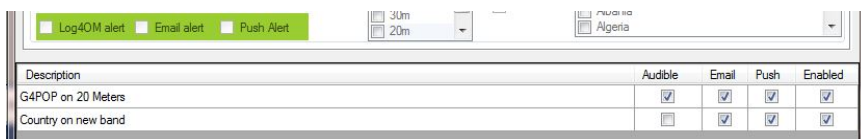


1. Click the 'Alerts' button at the top of the window.
2. Click the green plus (+) sign at the top of the window.
3. Enter a name in the 'Descriptions' field, e.g. 'Country on New band'
4. Select the closest spotter area to the users location
5. Select the mode required (e.g. Phone + CW)
6. Check the type(s) of alert(s) to be sent
7. Click the 'Confirmation Checks' tab



8. Check 'New on Band'
9. Select 'By Country'

10. Click the save icon at the top of the window.

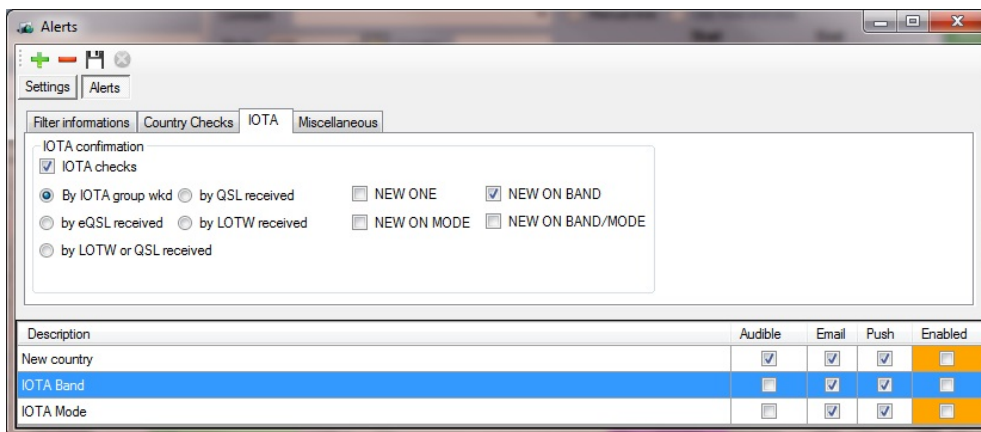


The example above will send an alert by email and by a Push alert to a mobile phone for a spot received from a spotter in the EU for a country using Phone or CW on any band that country has not been worked on before.

## Alerts for IOTA

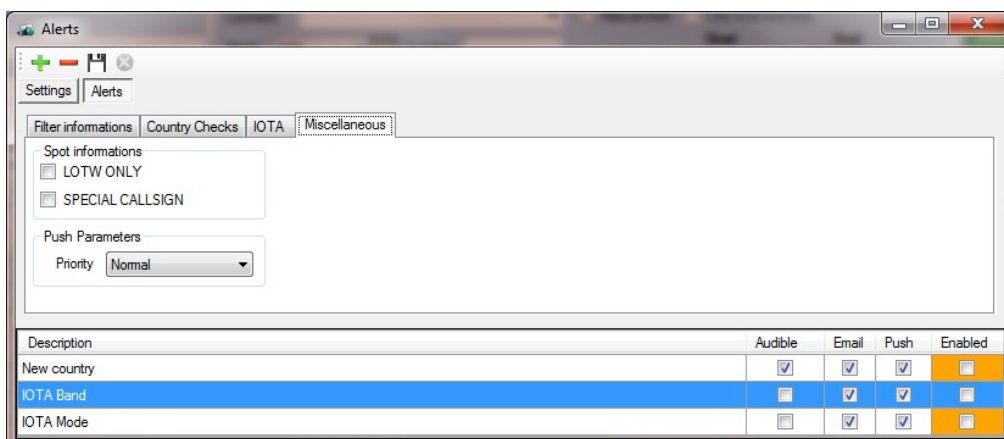
Select the 'IOTA' tab in the 'Alerts' window and select 'Enable' then select the required alert filters.

All alerts are cumulative e.g. selecting 'New one' and 'New on band' will result in all unworked IOTA entities and also IOTA entities previously worked on another band will be highlighted.



## Alerts Miscellaneous

The 'Miscellaneous' tab of the 'Alert' window provides filtering for LOTW users or spots with special call signs.



Please note the accuracy of IOTA alerts cannot be guaranteed because it is totally dependent upon the comments added by the spotter!

## Testing Alerts

There is a facility provided for testing alerts by simulating a spot for which an alert would be triggered without actually posting a spot to a DX cluster.

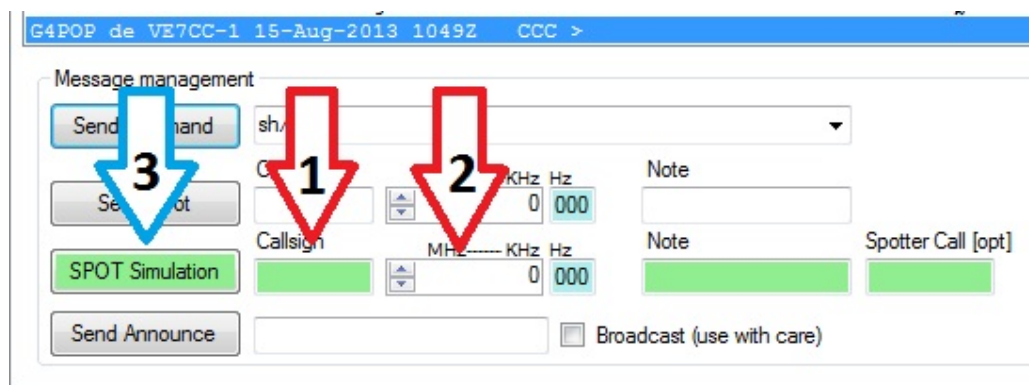
In the cluster F3 window enter a call sign which would trigger the alert, use a country call if checking a country alert etc., into the 'Callsign' field indicated by arrow 1 in the image below.

Enter a frequency in the field indicated by arrow 2 in the image below.

Click 'Spot Simulation' as indicated by arrow number 3 in the image below.

The spot will appear in the cluster list but not be sent to the DX cluster, this just a simulation to test an alert.

Additionally text may be added to the 'Notes' field i.e. an IOTA reference an/or the 'Spotter' field.



## Using the free Growl for Windows.

Log4OM sends 'Push' alerts to Growl then Growl forwards the push alerts to iPhones, iPads, Android phones or Windows 7 phones – Unlike SMS push alerts are free and sent via the internet.

Growl also gives you full control over how you are notified and what action (if any) you want to take in response to the notification.

You can choose to be alerted with a visual indicator or an audible alert, both, or neither. You can choose the type of display that is shown, whether the display remains on the screen, the importance of the notification, and even if the notification should be forwarded to another computer. You can have notifications that trigger an email, run a script, launch a program, or are read out loud.



Download Growl free from <http://www.growlforwindows.com/gfw/default.aspx>

Growl set up instructions are here <http://www.growlforwindows.com/gfw/help/>

Growl phone apps are here:

Android 'NMA' <http://www.growlforwindows.com/gfw/forwarders/notifymyandroid>

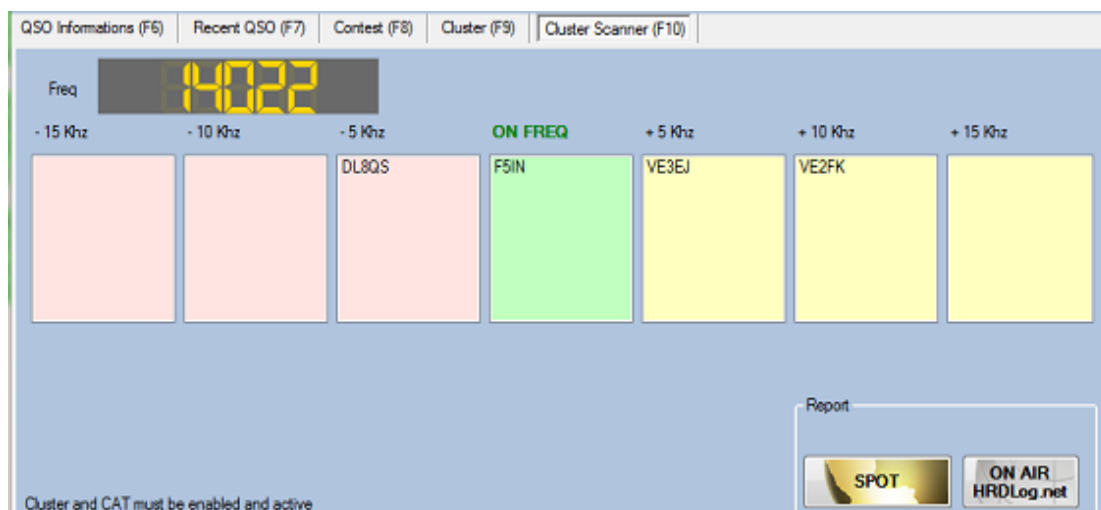
iPhone & iPad from the Apple App Store – Search for 'Prowl'

Windows Phone 7 'Toasty' <http://blog.growlforwindows.com/2010/10/toasty-notifications-for-windows-phone.html>

Growl runs in the background and should be set to start every time Windows is started.



## Cluster Scanner (F10)



This window displays the frequency centred at the current VFO frequency from the radio, if connected.

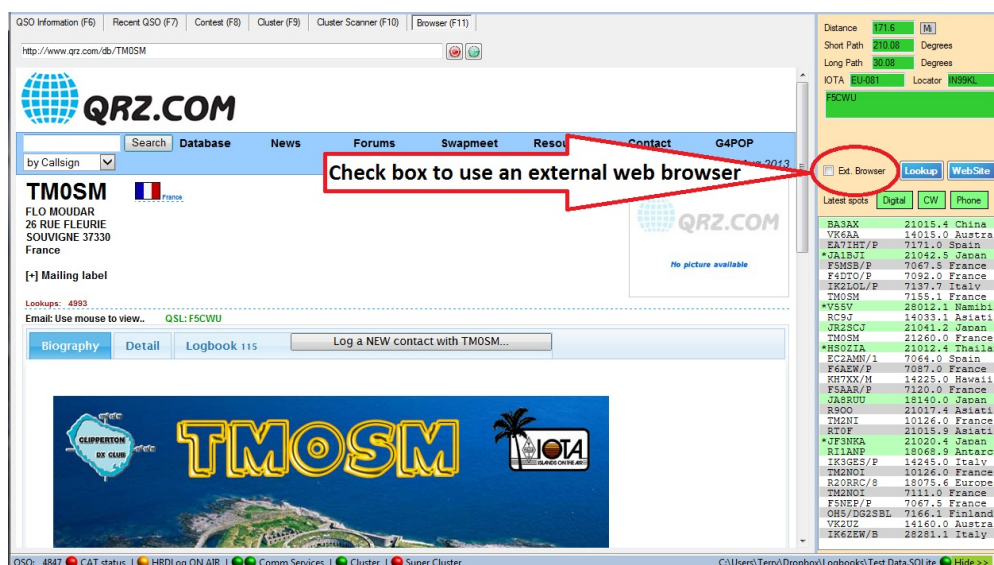
It displays all the stations on the cluster close to the radio's frequency between plus/minus 15 KHz with respect to the selected spot. (Other calls on the frequency indicate that the station is within plus/minus 1 KHz from each other).

Click on the Spot to tune the radio to the frequency of the cluster info for that call.

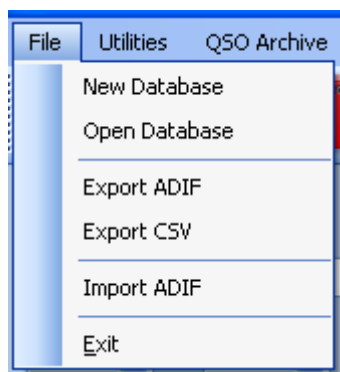
## Browser (F11)

Clicking on a cluster spot and then clicking the 'Lookup' button activates the internal browser.

Checking the 'Ext. Browser' check box causes an external browser to be used instead of the built in browser.



## Menu Bar and Icon Bar

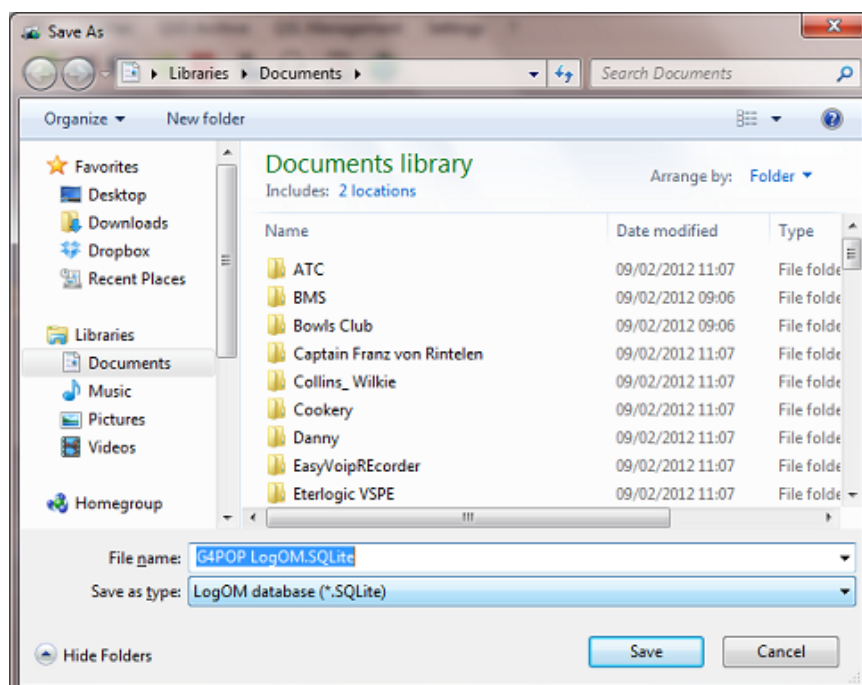


## File

### New Database

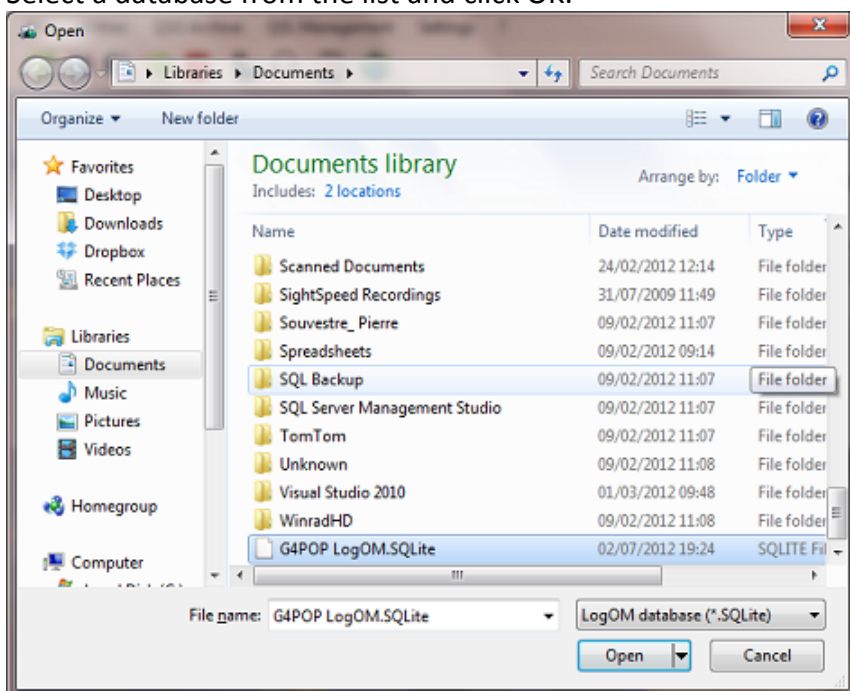
The user may have as many databases (Logbooks) as required e.g. Main call sign, Contest call sign or Special Event call sign etc.

Choose a name for each database and store it in a suitable location.



## Open Database

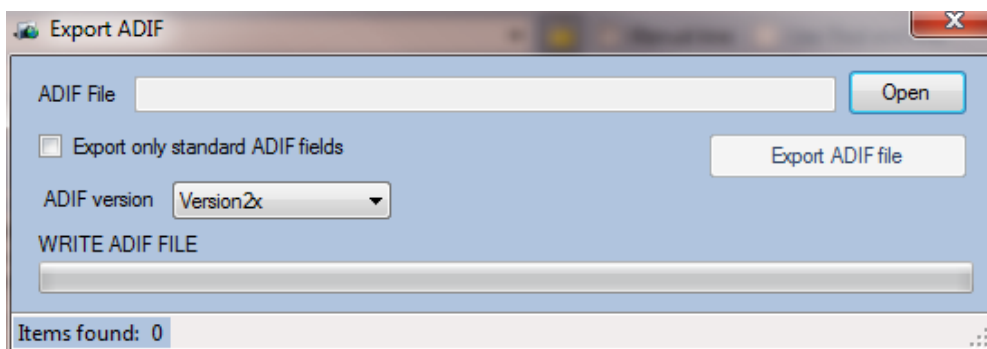
Select a database from the list and click OK.



## Export ADIF

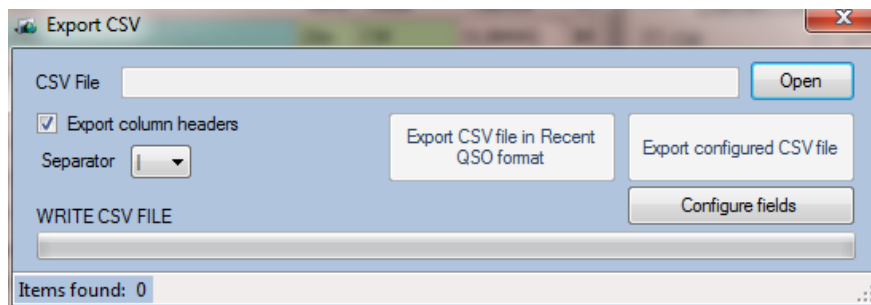
This feature is for exporting **ALL** of the QSOs from the Logbook as an ADIF file. If only part of the Log database is required for exporting go to the QSL Management feature. (See p 65)

Select which ADIF version the data should be exported in for maximum compatibility to other software



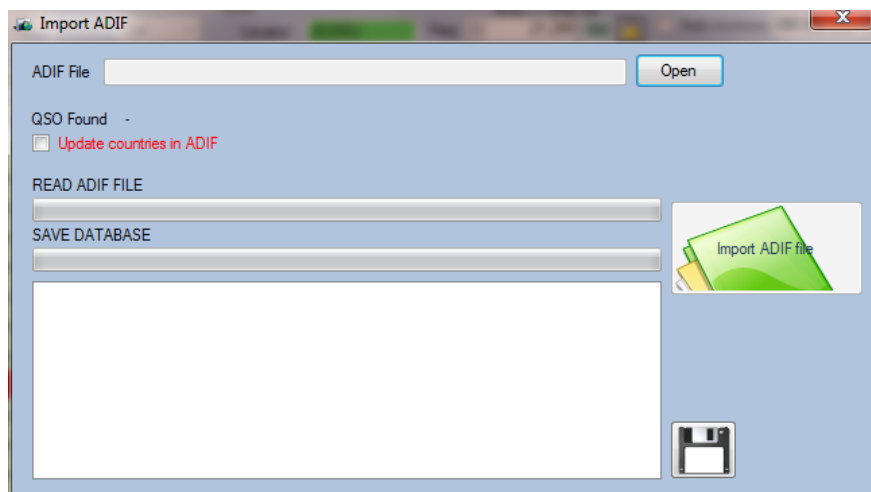
## Export CSV

Select some or all of the QSOs from the logbook and export to a CSV (Comma separated values) file for manipulation in a spreadsheet.



## Import ADIF

Use this feature to import an ADIF created in another logging program using the standard ADIF format.



## Menu Bar and Icon Bar



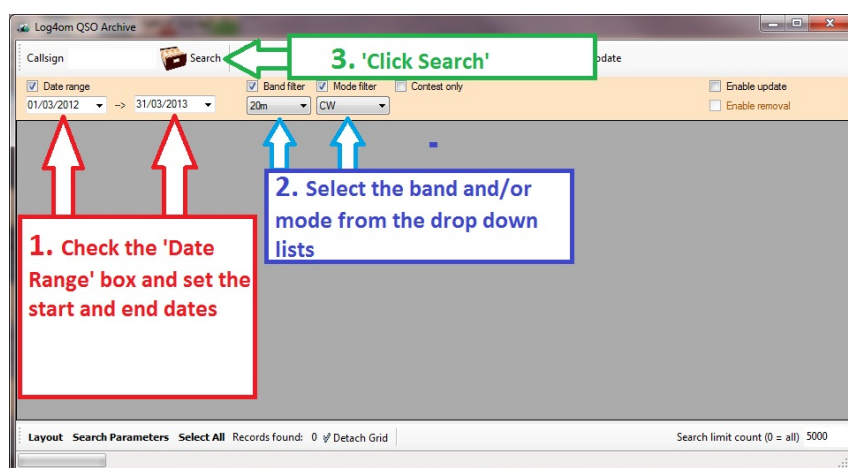
## Menu Bar and Icon Bar

### QSO Manager

#### Bulk Editing.

It is recommended to limit this editing operation to 30 – 40 QSOs at one time, in order to avoid massive changes to the log data. - **CAUTION: Editing is potentially dangerous so be sure to select and enter the correct information.**

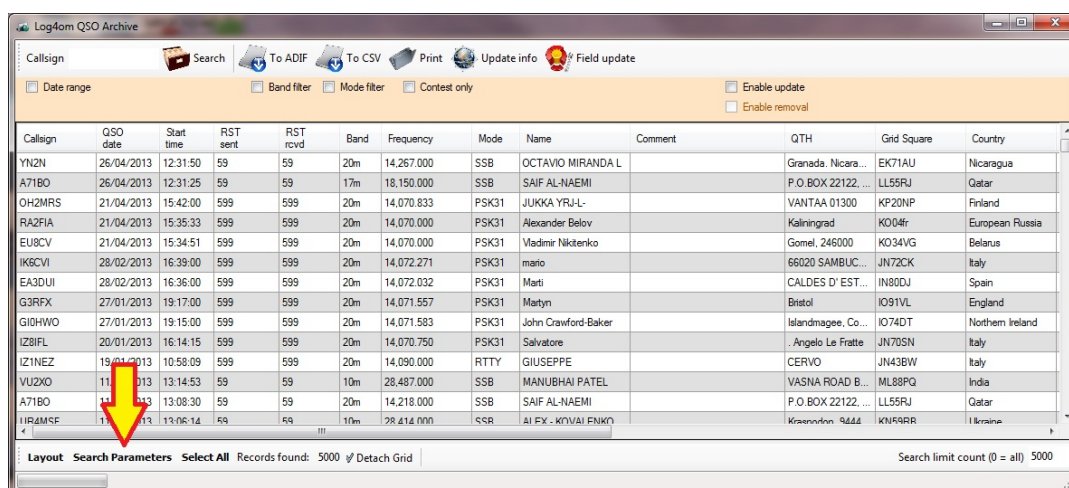
Log4OM provides pre-set searches in the main window, below is shown an example of searching the logbook by date range, band and mode.



Below is displayed the list that resulted from the search above ready for editing entries or export to ADIF, CSV or printer.

Callsign	QSO date	Start time	RST sent	RST rcvd	Band	Frequency	Mode	Name	Comment	QTH	Grid Square	Country
UA4NB	11/11/2012	14:56:48	599	599	20m	14.007.000	CW	VLADIMIR N. CHETY...		Kirov, ul. Mira, 4	LO48TP	Euroc
RK3SWB/1	25/07/2012	17:17:08	599	599	20m	14.029.500	CW					Euroc
V44KA	24/07/2012	08:58:26	579	559	20m	14.005.000	CW	JULIAS				Saint
UT90/P	24/07/2012	05:08:15	599	599	20m	14.021.000	CW	MIKHAIL				Ukrain
EXCP	17/07/2012	15:07:09	589	599	20m	14.026.800	CW	Belek O. Omushev		Kyrgyzstan	MN72pt	Kyrgyz
PA1F6BFH	16/07/2012	14:35:08	579	599	20m	14.035.090	CW	ALAIN	EU 038 CNFMD			Netherl
G0GRP	14/07/2012	06:09:57	599	599	20m	14.025.900	CW	DAVE				Englan
LA4RT	11/07/2012	20:44:05	589	599	20m	14.011.000	CW	JON				Norway
OZ0FR/P	10/07/2012	16:26:39	599	599	20m	14.013.370	CW	RIC				Denmar
LA4RT	10/07/2012	16:23:21	579	599	20m	14.041.000	CW	JON				Norway
YB7XO	10/07/2012	16:14:15	559	599	20m	14.033.060	CW	RICKY				O188ka
XE2MYY	07/07/2012	04:39:52	599	599	20m	14.020.000	CW	OSCAR				DL95wq
YB4IR	04/07/2012	16:26:56	579	599	20m	14.010.000	CW	IMAM RAHARJO	IMAM IN SUMATRA QSL DIR 2...	PALEMBANG	O127ta	Indone
V855S	04/07/2012	16:12:55	579	579	20m	14.024.140	CW	AMBRAN	qsl sent dir for 6 april 14mbz			Brunei
1A0C	03/07/2012	09:31:25	599	599	20m	14.027.780	CW					Soviet
ZL2AGY	03/07/2012	06:04:21	589	599	20m	14.008.120	CW	Tony	tony qsl QTH HAWERN			Newze
VK2DX	01/07/2012	05:56:55	599	599	20m	14.003.000	CW	NICK				Austr



For more comprehensive searches use the 'Search Parameters' feature shown below.

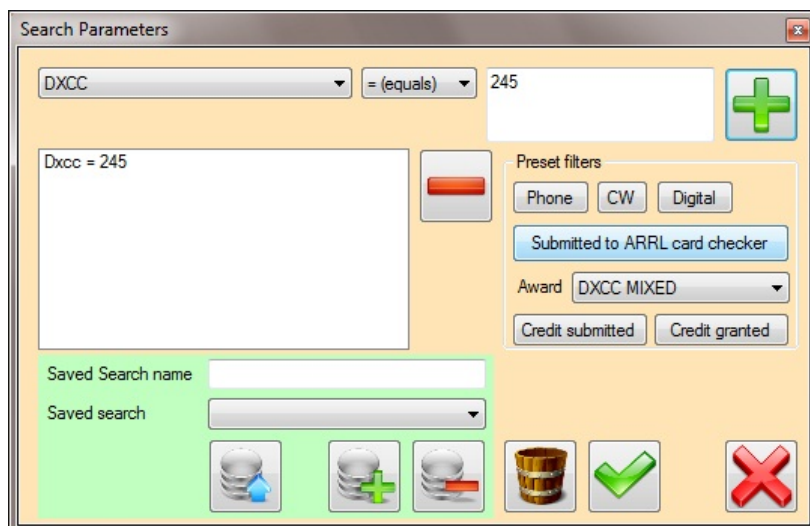


Call sign	QSO date	Start time	RST sent	RST rcvd	Band	Frequency	Mode	Name	Comment	QTH	Grid Square	Country
YN2N	26/04/2013	12:31:50	59	59	20m	14,267,000	SSB	OCTAVIO MIRANDA L		Grenada, Nicara...	EK71AU	Nicaragua
A71BO	26/04/2013	12:31:25	59	59	17m	18,150,000	SSB	SAIF AL-NAEMI		P.O. BOX 22122...	LL55RJ	Qatar
OH2MRS	21/04/2013	15:42:00	599	599	20m	14,070,833	PSK31	JUKKA YRJ-L		VANTAA 01300	KP20NP	Finland
RA2FIA	21/04/2013	15:35:33	599	599	20m	14,070,000	PSK31	Alexander Belov		Kaliningrad	KO04fr	European Russia
EU8CV	21/04/2013	15:34:51	599	599	20m	14,070,000	PSK31	Vladimir Niktenko		Gomel, 246000	KO34VG	Belarus
IK9CVI	28/02/2013	16:39:00	599	599	20m	14,072,271	PSK31	mario		66020 SAMBUC...	JN72CK	Italy
EA3DUI	28/02/2013	16:36:00	599	599	20m	14,072,032	PSK31	Marti		CALDES D' EST...	IN80DJ	Spain
G3RFX	27/01/2013	19:17:00	599	599	20m	14,071,557	PSK31	Martyn		Bristol	IO91VL	England
GI0HWO	27/01/2013	19:15:00	599	599	20m	14,071,583	PSK31	John Crawford-Baker		Islandmagee, Co...	IO74DT	Northern Ireland
I28IFL	20/01/2013	16:14:15	599	599	20m	14,070,750	PSK31	Salvatore		, Angelo Le Frat...	JN70SN	Italy
IZ1NEZ	19/01/2013	10:58:09	599	599	20m	14,090,000	RTTY	GIUSEPPE		CERVO	JN43BW	Italy
VU2XO	11/01/2013	13:14:53	59	59	10m	28,487,000	SSB	MANUBHAI PATEL		VASNA ROAD B...	ML88PQ	India
A71BO	11/01/2013	13:08:30	59	59	20m	14,218,000	SSB	SAIF AL-NAEMI		P.O. BOX 22122...	LL55RJ	Qatar
I1RAMSF	11/01/2013	13:06:14	59	59	10m	28,414,000	SSR	ALEX - KYVAI ENKO		Krasnovodsk 9444	KN59RR	Ukraine

Click on the 'Search Parameters' button at the bottom left of the screen shown above, to filter the QSOs requiring editing.

Then click on the drop down menu in the top left of the screen (In the image below DXCC is shown as the field selected) then enter the value required.

Click the  icon and then the  and then. Then click 'Search', next to the Call sign entry field in the top row.



Search Parameters

DXCC = (equals) 245

Dxcc = 245

Preset filters: Phone, CW, Digital

Submitted to ARRL card checker

Award: DXCC MIXED

Credit submitted, Credit granted

Saved Search name: [ ]

Saved search: [ ]

Icons: [ ] [ ] [ ] [ ] [ ] [ ]

Once the QSO's for bulk editing are displayed in the archive window.

1. Click on the 'Enable update' icon.
2. Highlight the QSO's for amendment.

Callsign	QSO date	Start time	RST sent	RST rcvd	Band	Frequency	Mode	Name	Comment	QTH
YN2N	26/04/2013	12:31:50	59	59	20m	14,267,000	SSB	OCTAVI...		Granada, Nicara...
A71BO	26/04/2013	12:31:25	59	59	17m	18,150,000	SSB	SAIF AL-NAEMI		P.O.BOX 22122...
OH2MRS	21/04/2013	15:42:00	599	599	20m	14,070,833	PSK31	JUKKA YRJ-L-		VANTAA 01300
RA2FIA	21/04/2013	15:35:33	599	599	20m	14,070,000	PSK31	Alexander Belov		Kaliningrad
EU8CV	21/04/2013	15:34:51	599		20m	14,070,000	PSK31	Vladimir Nikitenko		Gomel, 246000
IK6CVI	28/02/2013	16:39:00	599		20m	14,072,271	PSK31	mario		66020 SAMBUC...
EA3DUI	28/02/2013	16:36:00	599		20m	14,072,032	PSK31	Marti		CALDES D' EST...
G3RFX	27/01/2013	19:17:00	599		20m	14,071,557	PSK31	Martyn		Bristol
GI0HWO	27/01/2013	19:15:00	599		20m	14,071,583	PSK31	John Crawford-Baker		Islandmagee, Co...
I28IFL	20/01/2013	16:14:15	599		20m	14,070,750	PSK31	Salvatore		Angelo Le Fratte

3. Select the 'Field Update' button to display the update window shown below.

Field to update: Mode

Value: SSB

Execute custom update query

Query:

Warning potential data loss

Warning potential data loss

Warning potential data loss

Warning potential data loss

I UNDERSTAND THIS QUERY COULD POTENTIALLY DESTROY MY LOG. EXECUTE!

Log Check Up

Verify Frequency values

Verify Operator/Station Callsign

Verify Country from DXCC

Verify and fill Band values

SIMULATION (no save)

Execute checks

1. Select the field to be updated from the drop down list on the left.
2. Enter the new information into the Value box on the right.
3. Click the 'Update' button.

In the example above, the mode has been changed to 'SSB' for a selected QSO's

### To empty the ADIF field.

1. Click on the check box 'CLEAR FIELD'
2. Click the 'Update' button.

**CAUTION:** The field information matches exactly the latest ADIF definition and the value entered should conform to the standard ADIF format.

## Log Checks

The QSO Archive Manager provides a massive (Bulk) update facility for correcting or modifying logbook data.

The 'Log Check Up' box in the 'Massive QSO Update' window includes facilities to check the logbook for various discrepancies.

Log Check up is of particular use if a logbook has been imported from another program that lacks relevant information e.g. country, distance, heading or band.

A facility is provided to verify and update data for operator, empty frequency fields, Country, Band values and QSO distances and bearings.

The screenshot shows the 'Log4om QSO Archive' window. At the top, there are buttons for 'Search', 'To ADIF', 'To CSV', 'Print', 'Update info', and 'Field update'. Below these are checkboxes for 'Date range', 'Band filter', 'Mode filter', and 'Contest only'. On the right, there are checkboxes for 'Enable update' and 'Enable removal'. A table of QSOs is displayed with columns: Callsign, QSO date, Start time, RST sent, RST rcvd, Band, Frequency, Mode, Name, Comment, QTH, Grid Square, and Country. At the bottom, there are buttons for 'Layout', 'Search Parameters', and 'Select All', along with 'Records found: 5000' and 'Search limit count (0 = all) 5000'. Red arrows and numbers 1, 2, and 3 are overlaid on the image to indicate key actions: 1 points to the 'Enable update' checkbox, 2 points to the 'Field update' button, and 3 points to a selected row in the QSO list.

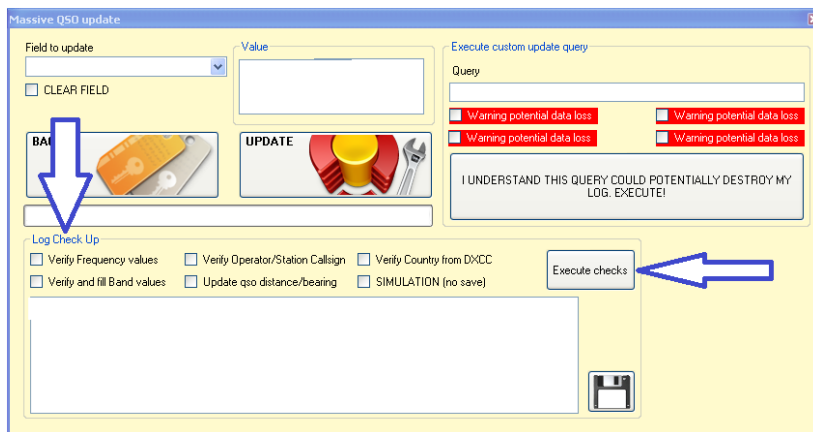
Callsign	QSO date	Start time	RST sent	RST rcvd	Band	Frequency	Mode	Name	Comment	QTH	Grid Square	Country
YN2N	26/04/2013	12:31:50	59	59	20m	14.267.000	SSB	OCTAVIO MIRANDA L		Granada, Nicara...	EK71AU	Nicaragua
A71BO	26/04/2013	12:31:25	59	59	17m	18.150.000	SSB	SAIF AL-NAEMI		P.O. BOX 22122, ...	LL55RJ	Qatar
OH2MRS	21/04/2013	15:42:00	599	599	20m	14.070.833	PSK31	JUKKA YRJ-L		VANTAA 01300	KP20NP	Finland
RA2FIA	21/04/2013	15:35:33	599	599	20m	14.070.000	PSK31	Alexander Belov		Kaliningrad	KOD4r	European Russia
EUBCV	21/04/2013	15:34:51	599	599	20m	14.070.000	PSK31	Vladimir Nikitenko		Gomel, 246000	KO34VG	Belarus
IK6CVI	28/02/2013	16:39:00	599	599	20m	14.072.271	PSK31	mario		66020 SAMBUC...	JN72CK	Italy
EA3DUJ	28/02/2013	16:36:00	599	599	20m	14.072.032	PSK31	Marti		CALDES D' EST...	IN80DJ	Spain
G3RFX	27/01/2013	19:17:00	599	599	20m	14.071.557	PSK31	Martyn		Bristol	IO91VL	England
G1GHWO	27/01/2013	19:15:00	599	599	20m	14.071.583	PSK31	John Crawford-Baker		Islandmagee, Co...	IO74DT	Northern Ireland
I28IFL	20/01/2013	16:14:15	599	599	20m	14.070.750	PSK31	Salvatore		Angelo Le Fratte	JN70SN	Italy
IZ1NEZ	19/01/2013	10:58:09	599	599	20m	14.090.000	RTTY	GIUSEPPE		CERVO	JN43BW	Italy
VU2XO	11/01/2013	13:14:53	59	59	10m	28.487.000	SSB	MANUBHAI PATEL		VASNA ROAD B...	ML88PQ	India
A71BO	11/01/2013	13:08:30	59	59	20m	14.218.000	SSB	SAIF AL-NAEMI		P.O. BOX 22122, ...	LL55RJ	Qatar
UR4MSF	11/01/2013	13:06:14	59	59	10m	28.414.000	SSB	ALEX - KOVALENKO		Kraenodon, 9444	KN59RB	Ukraine
DL/F4BKV	11/01/2013	13:03:39	59	59	20m	14.262.000	SSB	VINCENT COLOMBO		17350 PORT D'E...		Fed. Republic of ...
HZ1DG/P	10/01/2013	17:40:57	59	59	40m	7.165.000	SSB	ABDULRAHMAN G.A...		ABHA	LK18JG	Saudi Arabia
SP2HQP	3	16:10:29	59	59	20m	14.072.100	SSB	ROMAN BEDNARSKI		83-000 PRUSZC...	JO94HG	Poland
HASZX	2	15:34:00	599	599	20m	14.071.385	PSK31	Istvan Hiczo		Hatvan	JN97TP	Hungary
K8NY	2	16:45:47	59	59	17m	18.141.000	SSB	ROBERT F SENESI		CHARLES TOWN	FM19AG	United States
VK3EW	2	10:14:03	59	59	10m	28.485.000	SSB	David J. McAulay		Cranbourne, VIC	AA00AA	Australia
G3IRQ	09:58:15	09:58:15	59	59	80m	3.781.000	SSB	PETER RACKHAM		SUFFOLK	JO020D	England
JF3MYU	08:01:01	08:01:01	599	599	17m	18.071.000	CW	KIRKITAYA		KOBE, 652-0803	PM86TF	Japan
K1RM	12	12:21:36	599	599	10m	28.021.900	CW	VINCENT S SGROI		PLAINVILLE	FN31NQ	United States

1. Check/Tick the 'Enable update' box.
2. Highlight the QSOs for updating/verifying.
3. Click on 'Field Update'.



In the resulting window below:

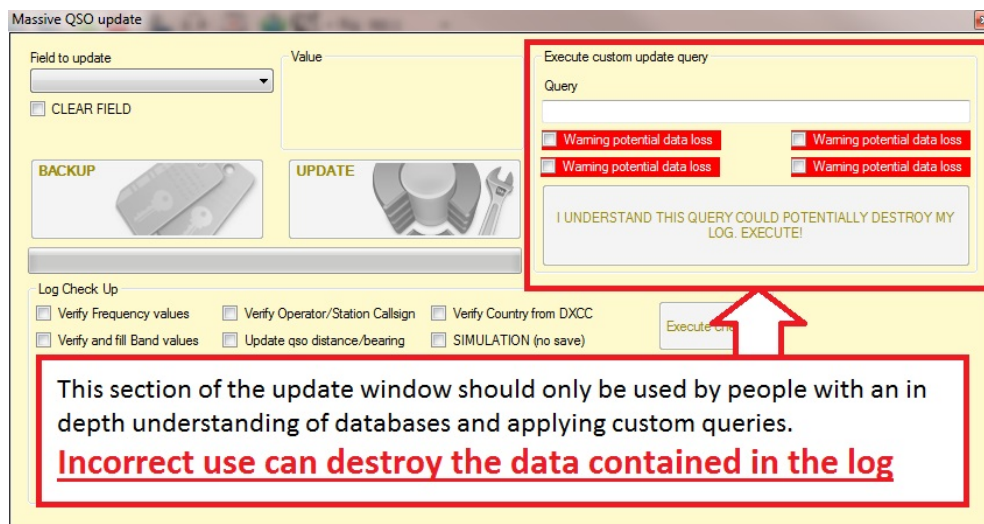
1. Check/Tick the required boxes in the 'Log Check up' area of the 'Massive QSO Update' window.
2. Click on the 'Execute Checks' button.
3. Close the 'Massive Update' window.



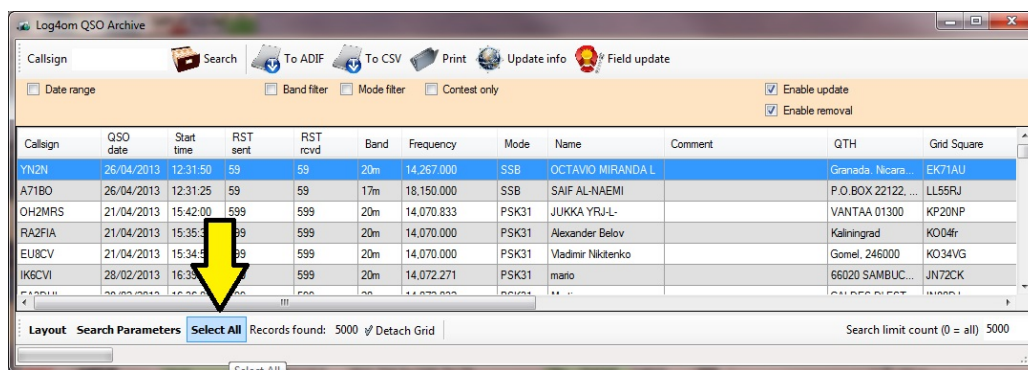
4. Refresh the 'QSO Archive Manager' screen in order to view the results.

### Custom Update query

This panel in the Massive QSO Update window is for experienced users only and incorrect use may result in a damaged logbook



## Select All



The 'Select all' button selects all of the currently displayed filtered entries.

## Log book Printing

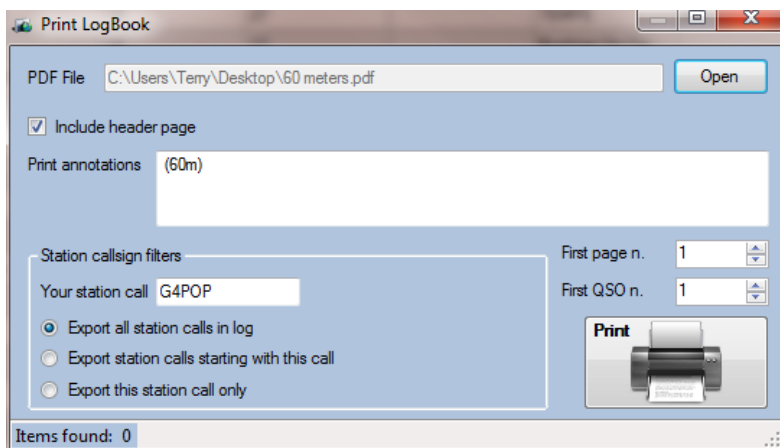
### Notes

- In the QSO archive window changing the layout and column widths only applies to the screen view, not to the 'Print' function.
- The 'Print' format is not user configurable.

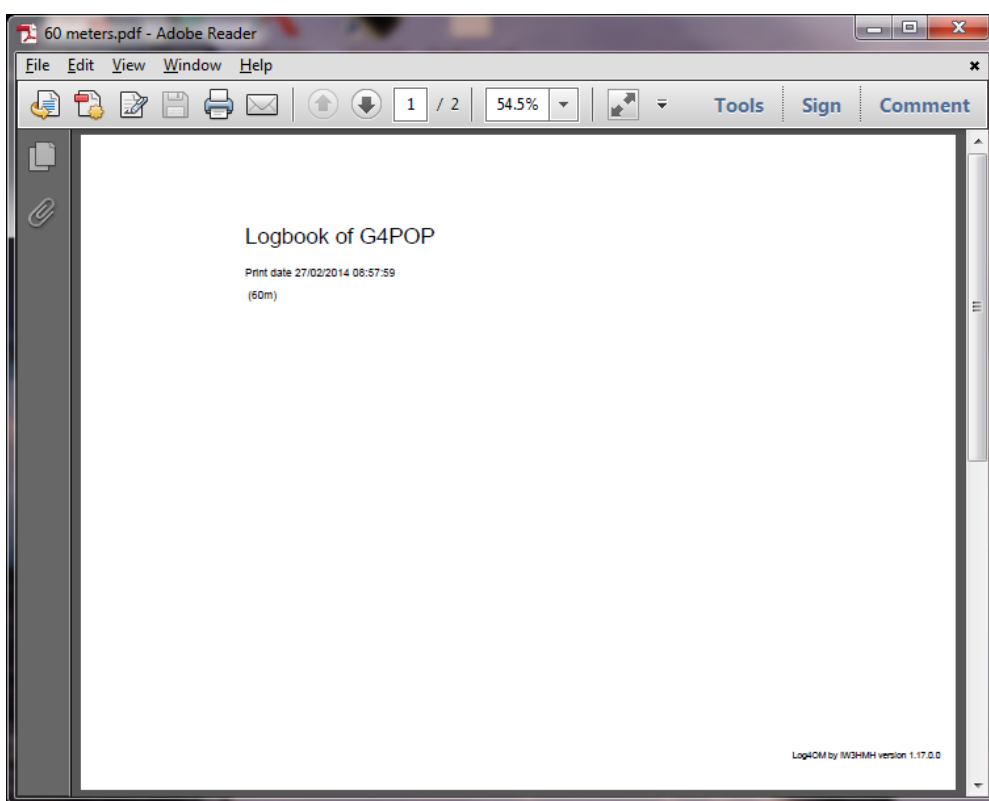
### Using the 'Print' facility

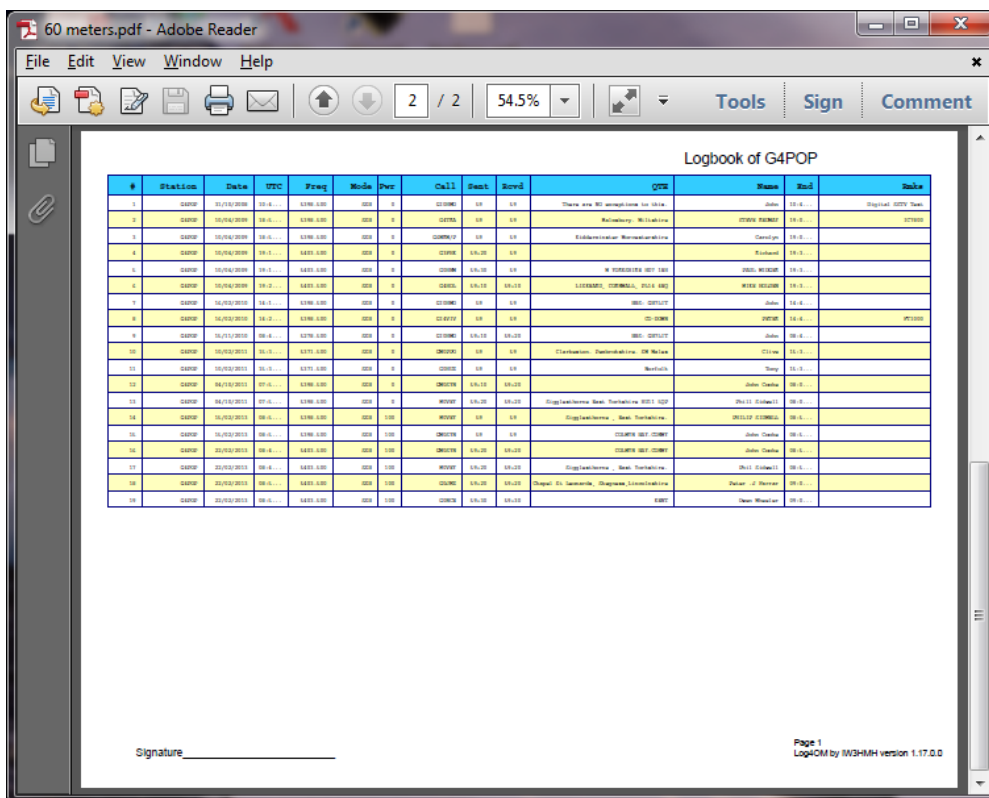
As stated in the notes the fields and columns are not configurable using this facility but the preset format will be adequate for most users

- Select 'QSO Archive Management'
- Filter to select the required QSO's for printing using the preset 'date range', 'Band', 'Mode' & 'Contest' filters or the 'Search Parameters' facility
- Click the search button
- Highlight the calls to be printed
- Click the 'Print' button.
- In the resulting dialog window set a location and name for the file in the 'PDF file' field
- Select the 'Station callsign filters' required
- Check the 'Include Header page' box if a header page is required
- Click the 'Print' button.



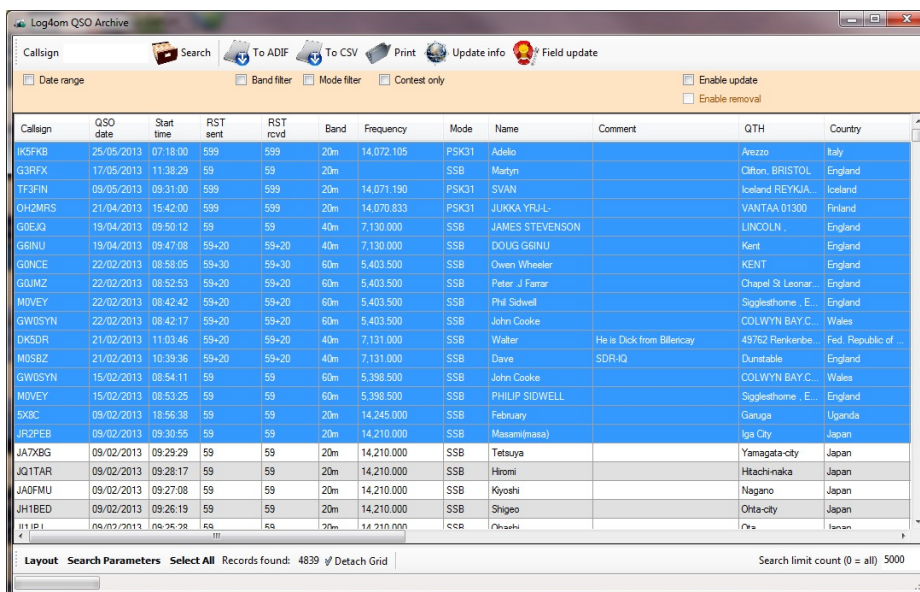
The resulting PDF file can now be printed as below.





Using the 'To CSV' facility' to print the logbook

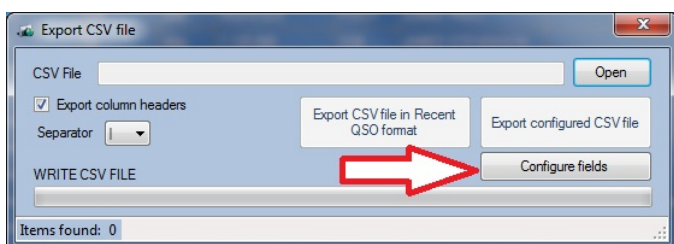
1. Go to the QSO archive window and select/sort the QSO's that you want to print.
2. Highlight the QSO's for printing



3. Click the 'To CSV' button

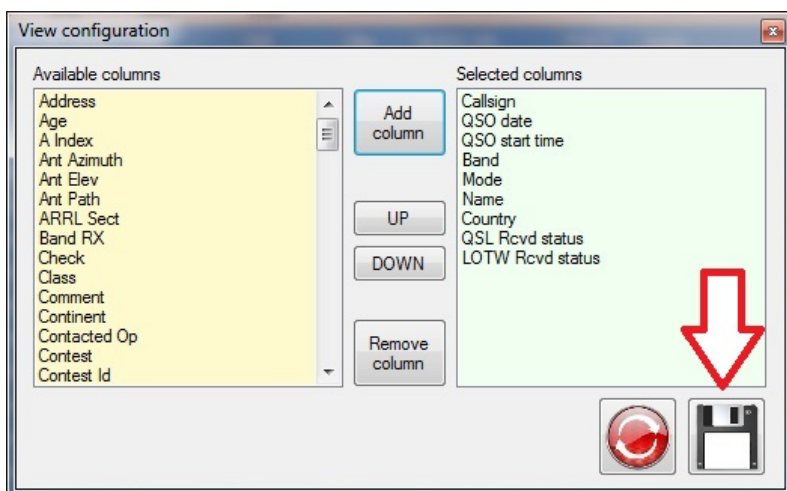
Callsign	QSO date	Start time	RST sent	RST rcvd	Frequency	Mode	Name
IK5FKB	25/05/2013	07:18:00	599	599	14.072.105	PSK31	Adelio
G3RFX	17/05/2013	11:38:29	59	59		SSB	Martyn
TF3FIN	09/05/2013	09:31:00	599	599	14.071.190	PSK31	SVAN
OH2MRS	21/04/2013	15:42:00	599	599	14.070.833	PSK31	JUKKA YRJ-L

4. Click 'Configure Fields' button

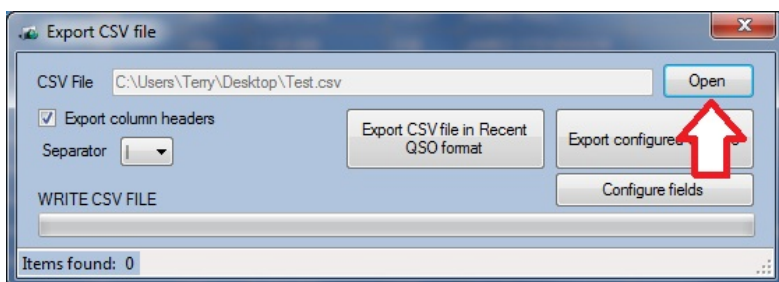


5. Select the fields to be printed and the order in which you need them displayed

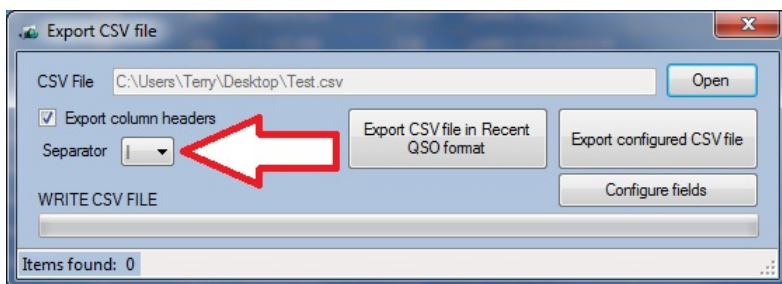
6. Save the configuration by clicking the floppy disk save button.



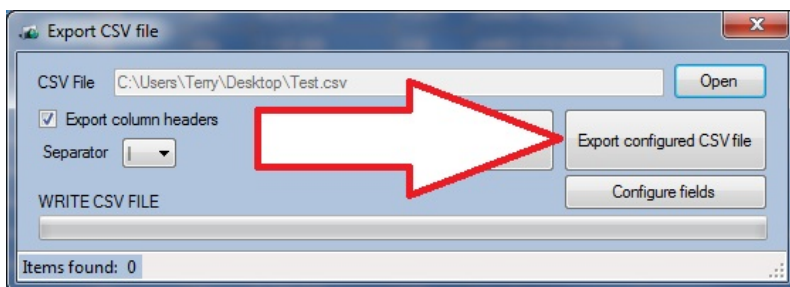
7. Click the 'Open' button and select a location and name for the file



8. Change the separator from | to a comma ','



9. Click the 'Export configured CSV file' button



10. Close the archive windows

You can now open the CSV file that you just saved in any word processor or spreadsheet program and print the log pages as you wish.

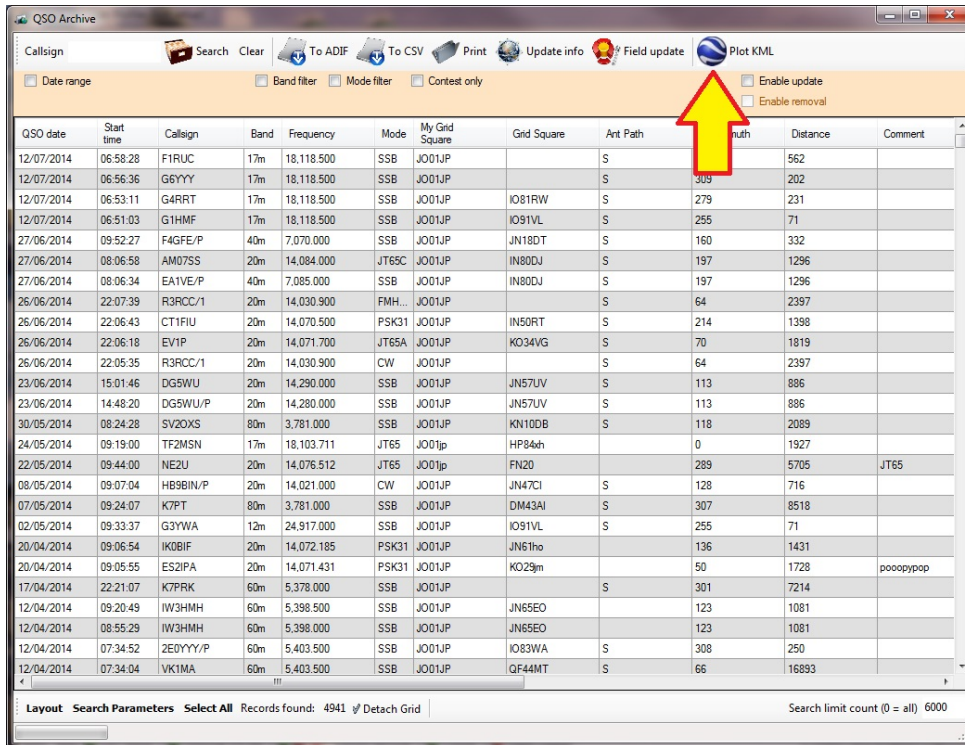
	A	B	C	D	E	F	G	H	I
	<u>Callsign</u>	<u>QSO date</u>	<u>SO start tin</u>	<u>Band</u>	<u>Mode</u>	<u>Name</u>	<u>Country</u>	<u>L Rcvd</u>	<u>stat LOTW Rcvd</u>
2	JR2PEB	09/02/2013	09:30:55	20m	SSB	Masami(masa)	Japan	N	N
3	5X8C	09/02/2013	18:56:38	20m	SSB	February	Uganda	N	N
4	M0VEY	15/02/2013	08:53:25	60m	SSB	PHILIP SIDWELL	England	N	N
5	GW0SYN	15/02/2013	08:54:11	60m	SSB	John Cooke	Wales	N	N
6	M0SBZ	21/02/2013	10:39:36	40m	SSB	Dave	England	N	N
7	DK5DR	21/02/2013	11:03:46	40m	SSB	Walter	Fed. Republic of Germany	N	N
8	GW0SYN	22/02/2013	08:42:17	60m	SSB	John Cooke	Wales	N	N
9	M0VEY	22/02/2013	08:42:42	60m	SSB	Phil Sidwell	England	N	N
10	G0JMZ	22/02/2013	08:52:53	60m	SSB	Peter J Farrar	England	N	N
11	G0NCE	22/02/2013	08:58:05	60m	SSB	Owen Wheeler	England	N	N
12	G6INU	19/04/2013	09:47:08	40m	SSB	DOUG G6INU	England	N	N
13	G0EJQ	19/04/2013	09:50:12	40m	SSB	JAMES STEVENSON	England	N	N
14	OH2MRS	21/04/2013	15:42:00	20m	PSK31	JUKKA YRJ-L-	Finland	N	N
15	TF3FIN	09/05/2013	09:31:00	20m	PSK31	SVAN	Iceland	N	N
16	G3RFX	17/05/2013	11:38:29	20m	SSB	Martyn	England	N	N

Using a CSV file in word processors or spreadsheets provided the ultimate flexibility for the user.

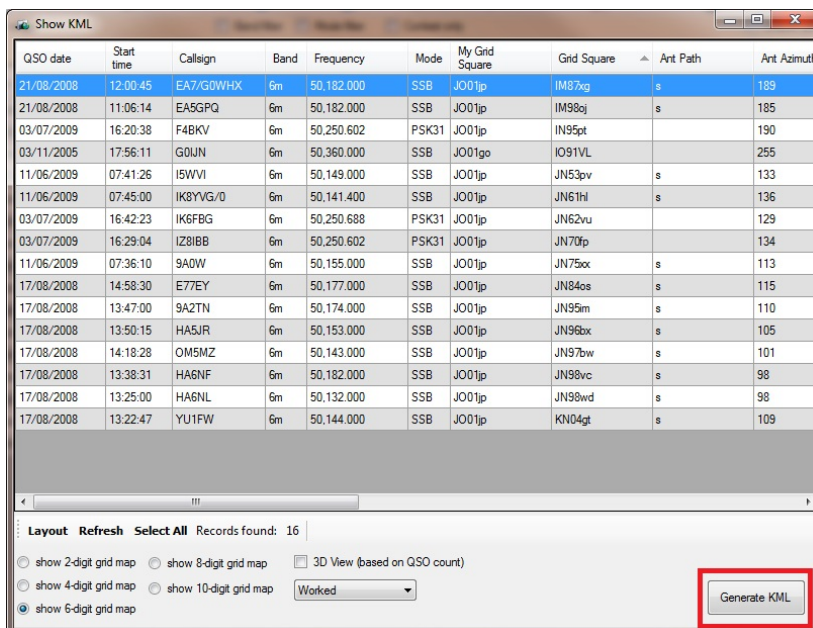
## Plotting grid squares to Google Earth

The QSO manager provides plotting of grid squares (Locators) to Google Earth providing the Google Earth software is installed on the users computer.

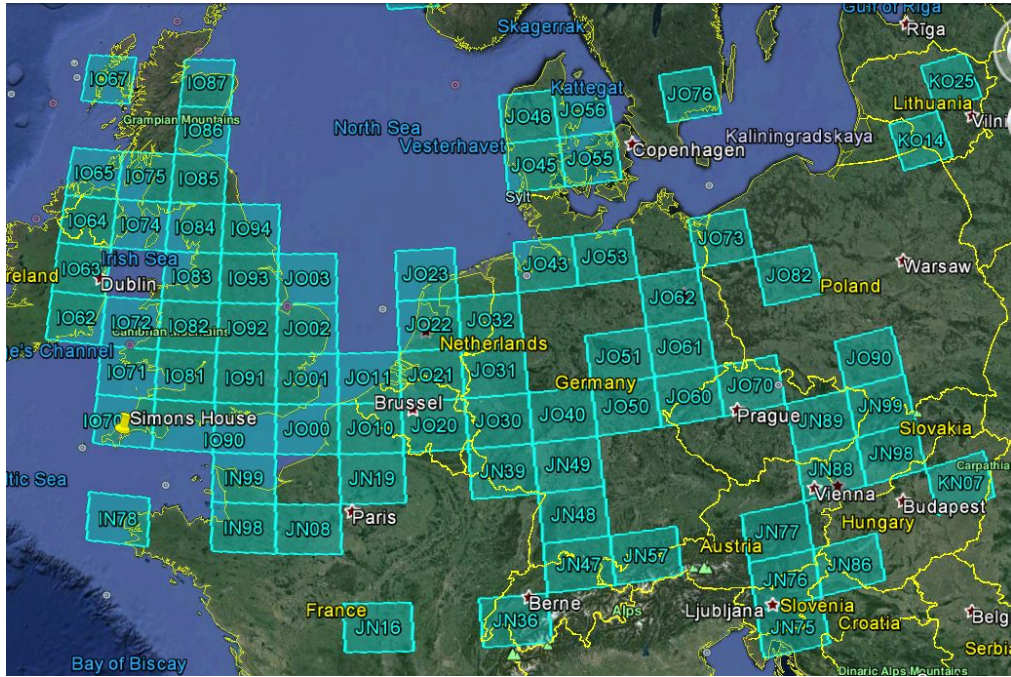
1. Sort and select the required QSO's for display e.g. all stations worked on 6 meters



2. Click the "Plot KML" button



3. Select the QSO's to be plotted from the list
4. Select the view (2, 4, 6, 8 or 10 digit grids)
5. Click the "Generate KML" button





## Menu Bar and Icon Bar



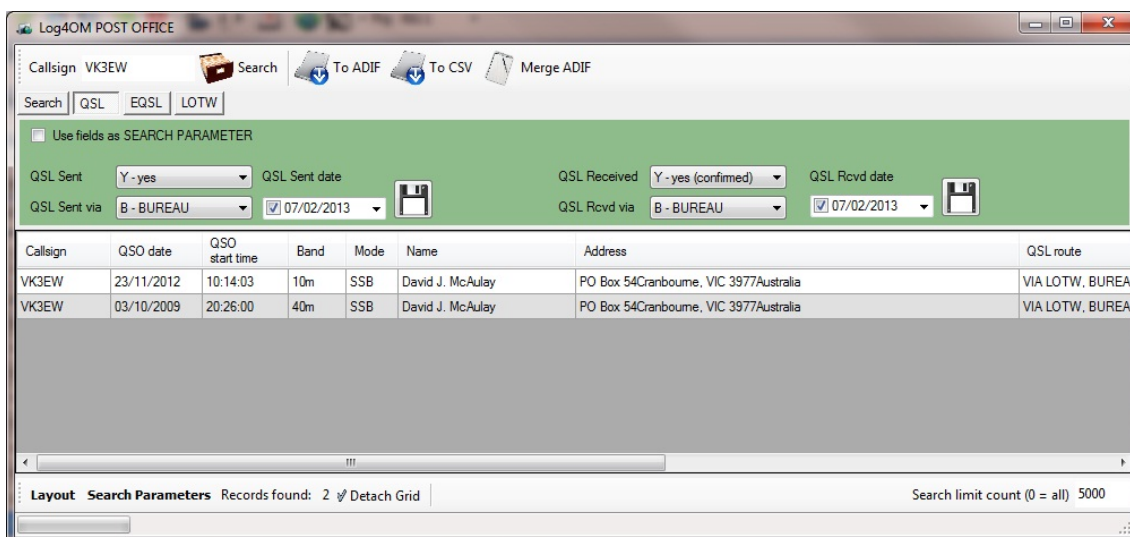
### QSL Tools

#### QSL Management

Log4OM provides the facility to manage a system for management of the state of the QSL, subdivided into paper QSL, EQSL and LOTW. To activate the system, click on the red post box icon shown in the screen above or select QSL Management from the QSL Tools menu.

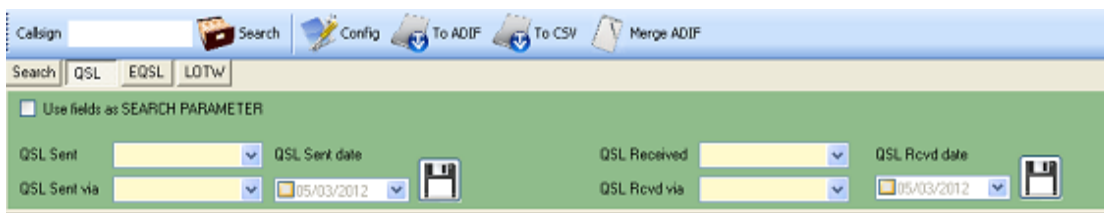
#### PLEASE NOTE

*The upload and download of QSO's to all internet based logbooks like LOTW and eQSL will not function if the relevant user names, passwords and nicknames have not been entered in the 'External Logs tab of the options menu as detailed earlier in this guide.*



The logbook can be filtered to display QSL status by QSL Type, QSL Sent, QSL Sent Via, QSL Received, QSL Received Via, Dates and Call sign or by using the Search parameters facility.

Once filtered, the results can be exported to ADIF or CSV file or an ADIF can be merged.



This screen allows changes to be made to the values of the 'SENT' and 'RECEIVED' fields for paper QSLs.

## Processing Paper QSL's in Log4OM

How paper QSL's are processed depends on the individual requirements of the user.

Some users process outgoing QSL cards only upon receipt of an incoming card, the method of processing QSL's for this is described below in 'QSL Processing – Reactive method'

Other users process outgoing paper QSL's soon after the QSO date, regardless of having received an incoming QSL card, with the expectation that the other station will be prompted to QSL upon receipt of the QSL card. This method of processing QSL's is described below in 'QSL Processing – Proactive Method'.

### *QSL Processing – Reactive method*

Ensure that in the 'Settings/QSL & Labels' tab of the Options menu that 'Default QSL sent' is set to 'N-no'



1. In the 'QSL Management' window select the 'QSL' button
2. Enter the call of the incoming QSL card and click 'Search' or press the 'Enter' button on the keyboard.
3. Check the details on the incoming card match the details shown in the logbook for the QSO – If they match proceed to step 5
4. In the 'QSL Sent field' select 'Q-Queued'
5. In the 'QSL sent via' field select the method of dispatch (Bureau, Direct, Electronic, Manager)
6. Set the 'QSL sent date'
7. Click the save icon (Floppy disk icon)
8. Set the 'QSL received' status
9. Set the 'QSL Rcvd Via' status
10. Set the 'QSL Rcvd date'
11. Click the save icon (Floppy disk icon)

## Process Outgoing QSLs - General

Enter the call sign in the call sign field and select the QSL Tab, then click on the Search Icon, shown as an open file box drawer. A list of the QSOs made with the entered call sign will appear. Highlight the relevant call and select YES on the drop down menu in the 'QSL sent' field.

Follow the same procedure with the 'QSL sent VIA' field and the 'QSL sent date' field. Click on the diskette icon to update and save the data.

To process incoming QSL cards, follow the same procedure using the 'Received' fields.

### Targeted Searches

It is possible to carry out targeted searches by selecting the check box 'Use fields as search parameter.' The buttons will disappear and the 'save the fields'(all visible) will be used to filter and search within the QSO list.

Pressing the Search button performs the search with the parameters indicated. To return to Edit mode, simply uncheck the check box.

### *Export an ADIF or CSV*

The filtered records can be exported as an ADIF or CSV.

### *Merge ADIF*

There are occasions when it is required to update existing logbook information with data from another source.

#### *Examples:*

1. A QSL manager provides a version of the users log, which has been updated with QSL information.
2. The user has two computers that need to be synchronised.

In number 2 above, first export the current logbook from the main computer in the normal manner using 'File/Export ADIF' and import the file to the secondary computer so that the information may be updated, with for example with the latest QSO data.

If using **Log4OM** on the secondary computer no duplicates will be added and existing data on the secondary computer will not be overwritten. This is because Log4OM checks the QSO's in imported ADIF for Date, Time, Call sign, Band, Frequency and mode and if a QSO with matching data is found it is treated as a duplicate and not imported, only QSO's that are not already in the logbook are imported.

**However extreme care should be exercised if using any other software on the secondary computer to avoid overwriting important data.**

When the data has been updated on the secondary computer, e.g. the QSL status has been updated, the updated data must be exported as an ADIF file so that it may be merged with existing logbook data on the main computer.

Merging data is different to an import – The data to be merged is matched to the existing logbook data and when a QSO with matching *Date, Time, Call sign, Band, Frequency and mode* is found only information for that QSO which is different is changed/updated.

*Example: The QSL received or sent status has been changed from N-no to Y-yes*

**Step 1.**

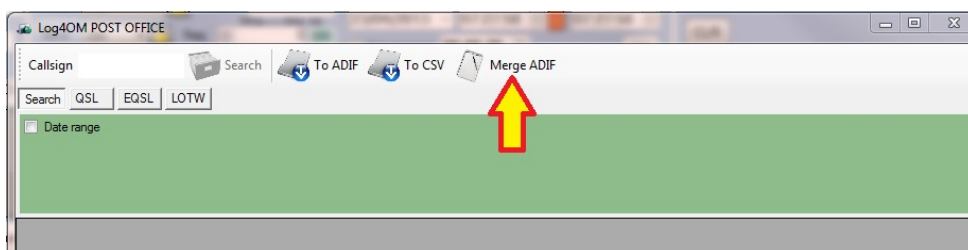
Export the data from the secondary computer that contains the updated data (e.g. Updated QSL information) using whatever ADIF export is provided by the host software.

**Step 2.**

In Log4OM either open the QSL management window by clicking on the Red 'Post Box' icon on the toolbar or by selecting 'QSL Management' from the QSL Tools drop down menu.

**Step 3.**

In the QSL manager click on the 'Merge ADIF' button and select the updated ADIF file that was exported from the secondary computer.

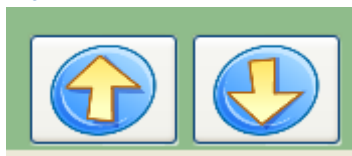
**Step 4.**

Click 'Open' and the file will be merged with the main logbook data only updating the data with any modified information contained on the ADIF file exported from the secondary computer.

This operation may be used in reverse if both computers are using Log4OM to update information on the secondary computer with data from the main computer.

**CAUTION: Such merges overwrite all QSO information with the data from the new file.**

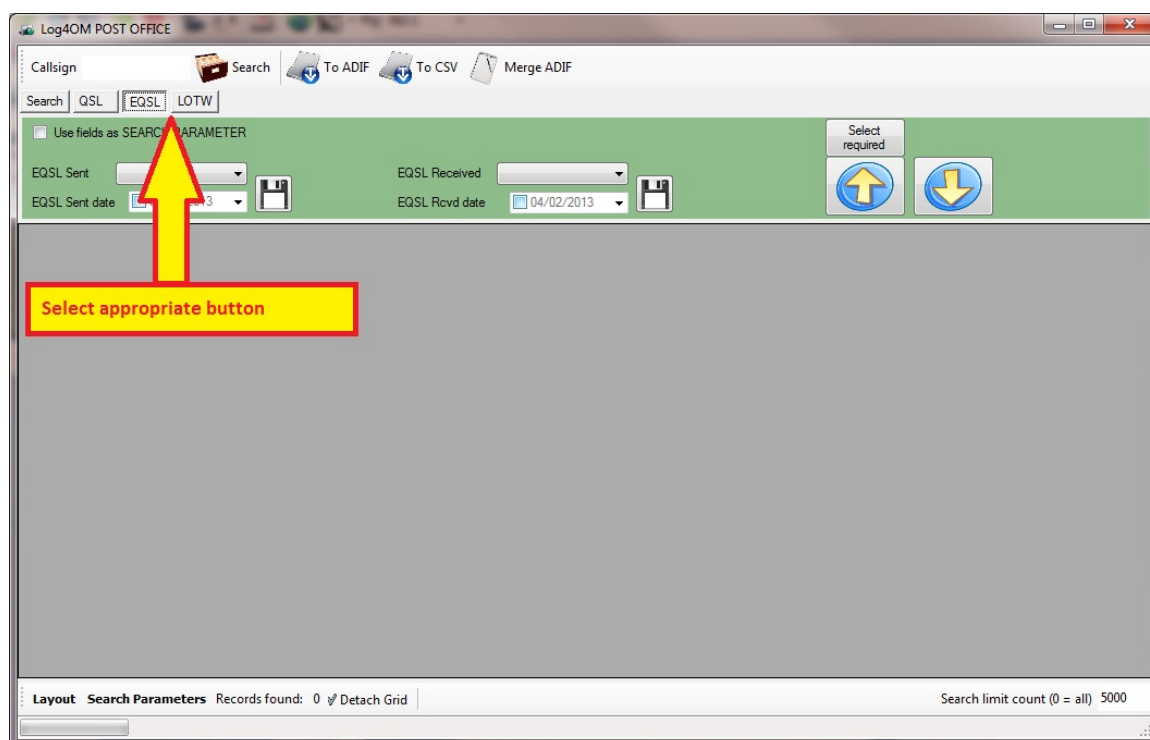
## EQSL & LOTW UPLOAD AND DOWNLOAD



Log4OM provides full support for EQSL and LOTW. It is possible to upload the selected QSOs by pressing the key of 'UPLOAD' to EQSL or LOTW.

### Bulk EQSL & LOTW upload

Follow the illustrated steps below for bulk upload to either EQSL or LOTW



The correct method of using this screen is .....

1. Click on the eQSL or LOTW button - The user is presented with the following choices .....

- A. Click the 'Search' button at the top to display all QSO's in the logbook in descending date order.
- B. Or check the box 'Use fields as search parameters' - With this choice you can search your log for QSO's marked with the LOTW sent and received status as per the entries in the drop down lists and/or select by date range.

When a list of QSO's is displayed by using either method A or B above..

- a. Highlight the QSO's required for uploading.
- b. Click the up arrow (The users can also click on the 'Select All' button at the bottom of the window to select everything in the list.)

## Search and select QSO's

Log4OM POST OFFICE

Callsign Search To ADIF To CSV Merge ADIF

Search QSL EQSL LOTW

Use fields as SEARCH PARAMETER

EQSL Sent  EQSL Received

EQSL Sent date 04/02/2013 EQSL Rcvd date 04/02/2013

Select required

Callsign	QSO date	QSO start time	Band	Mode	EQSL Sent status	EQSL Sent date	EQSL Rcvd status	EQSL Rcvd date
LX5UW	27/01/2013	19:45:28	40m	PSK31	Y - Yes		N - No	
P40YL	26/01/2013	16:45:55	15m	RTTY	Y - Yes	26/01/2013	N - No	
YU150TC	26/01/2013	16:21:05	20m	RTTY	Y - Yes	26/01/2013	N - No	
OM3TYC	26/01/2013	15:58:30	20m	RTTY	Y - Yes	26/01/2013	N - No	
YL2CI	26/01/2013	15:52:39	20m	RTTY	Y - Yes	26/01/2013	N - No	
OK2SFP	26/01/2013	14:47:36	20m	RTTY	Y - Yes	26/01/2013	N - No	
OH2BBT	26/01/2013	14:40:29	20m	RTTY	Y - Yes	26/01/2013	N - No	
SF6DX	26/01/2013	14:35:57	20m	RTTY	Y - Yes	26/01/2013	N - No	
YT3H	26/01/2013	14:32:59	20m	RTTY	Y - Yes	26/01/2013	N - No	
IK0PRP	26/01/2013	12:55:23	20m	RTTY	Y - Yes	26/01/2013	N - No	
UW4I	26/01/2013	12:52:19	20m	RTTY	Y - Yes	26/01/2013	N - No	
N2KI	26/01/2013	12:43:15	20m	RTTY	Y - Yes	26/01/2013	N - No	
YU150TC	26/01/2013	12:35:48	20m	RTTY	Y - Yes	26/01/2013	N - No	
IW1PNJ	26/01/2013	12:29:29	20m	RTTY	Y - Yes	26/01/2013	N - No	
SM0BSO	26/01/2013	12:17:17	20m	RTTY	Y - Yes	26/01/2013	N - No	
EA6QY	24/01/2013	16:35:18	20m	RTTY	Y - Yes	26/01/2013	N - No	
IS0YTA	24/01/2013	16:28:09	20m	RTTY	Y - Yes	26/01/2013	N - No	

Select QSO's by call, QSL sent received date and status or by using the 'Search Parameters' provision.

Highlight the QSO's required for upload using the standard Windows method detailed on page 30 of this guide.

Layout Search Parameters Records found: 3416 Detach Grid Search limit count (0 = all) 5000

## Upload

Log4OM POST OFFICE

Callsign Search To ADIF To CSV Merge ADIF

Search QSL EQSL LOTW

Use fields as SEARCH PARAMETER

EQSL Sent  EQSL Received

EQSL Sent date 04/02/2013 EQSL Rcvd date 04/02/2013

Select required

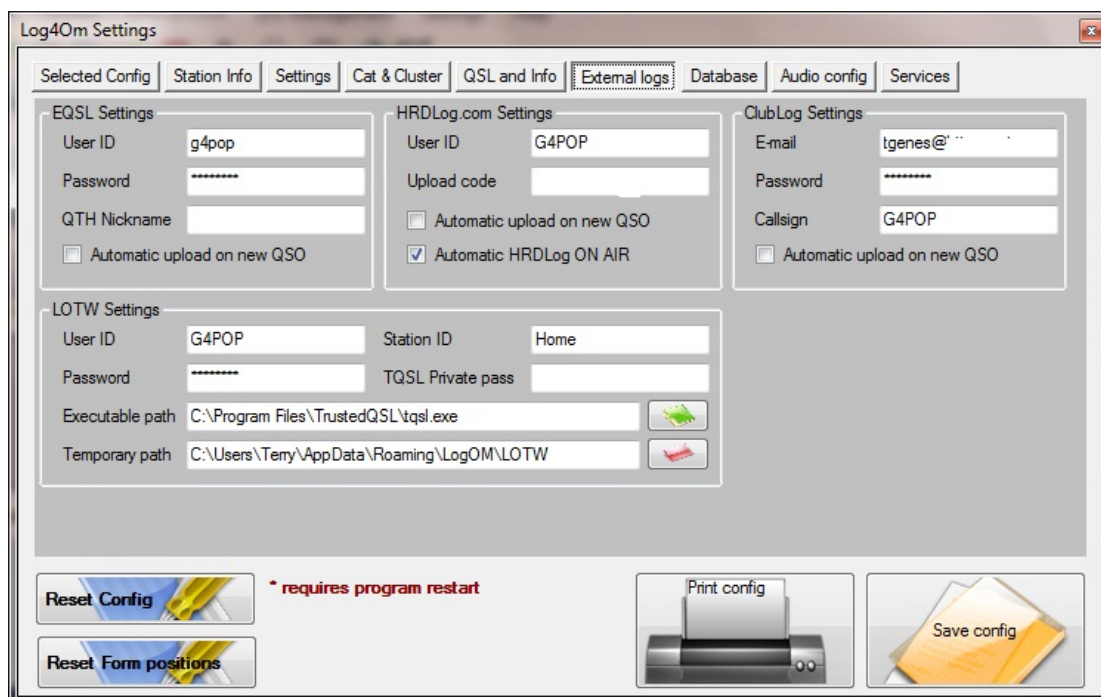
Callsign	QSO date	QSO start time	Band	Mode	EQSL Sent status	EQSL Sent date	EQSL Rcvd status	EQSL Rcvd date
LX5UW	27/01/2013	19:45:28	40m	PSK31	Y - Yes		N - No	
P40YL	26/01/2013	16:45:55	15m	RTTY	Y - Yes	26/01/2013	N - No	
YU150TC	26/01/2013	16:21:05	20m	RTTY	Y - Yes	26/01/2013	N - No	
OM3TYC	26/01/2013	15:58:30	20m	RTTY	Y - Yes	26/01/2013	N - No	
YL2CI	26/01/2013	15:52:39	20m	RTTY	Y - Yes	26/01/2013	N - No	
OK2SFP	26/01/2013	14:47:36	20m	RTTY	Y - Yes	26/01/2013	N - No	
OH2BBT	26/01/2013	14:40:29	20m	RTTY	Y - Yes	26/01/2013	N - No	
SF6DX	26/01/2013	14:35:57	20m	RTTY	Y - Yes	26/01/2013	N - No	
YT3H	26/01/2013	14:32:59	20m	RTTY	Y - Yes	26/01/2013	N - No	
IK0PRP	26/01/2013	12:55:23	20m	RTTY	Y - Yes	26/01/2013	N - No	
UW4I	26/01/2013	12:52:19	20m	RTTY	Y - Yes	26/01/2013	N - No	
N2KI	26/01/2013	12:43:15	20m	RTTY	Y - Yes	26/01/2013	N - No	
YU150TC	26/01/2013	12:35:48	20m	RTTY	Y - Yes	26/01/2013	N - No	
IW1PNJ	26/01/2013	12:29:29	20m	RTTY	Y - Yes	26/01/2013	N - No	
SM0BSO	26/01/2013	12:17:17	20m	RTTY	Y - Yes	26/01/2013	N - No	
EA6QY	24/01/2013	16:35:18	20m	RTTY	Y - Yes	26/01/2013	N - No	
IS0YTA	24/01/2013	16:28:09	20m	RTTY	Y - Yes	26/01/2013	N - No	

Once the desired QSO's are highlighted click the up arrow

Layout Search Parameters Records found: 3416 Detach Grid Search limit count (0 = all) 5000

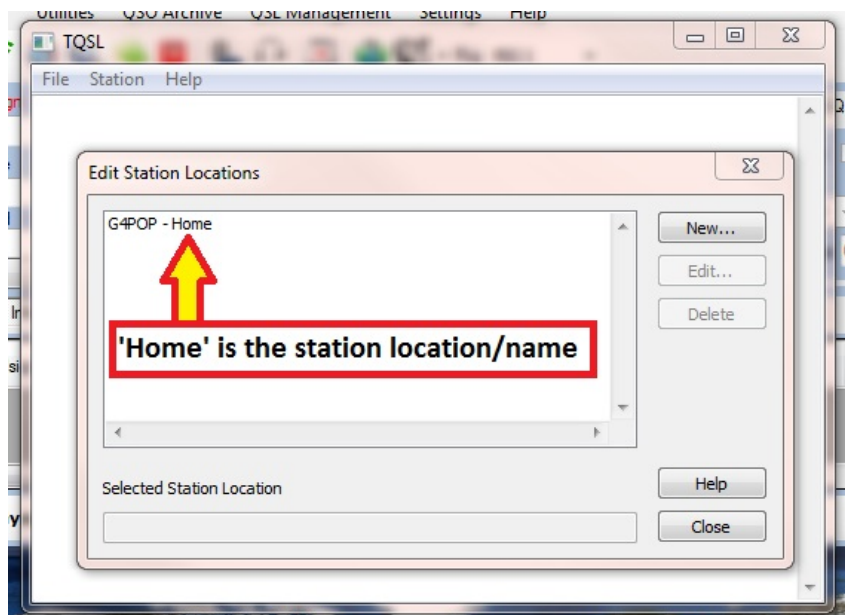
## LOTW Upload

The user must ensure that he has completed the LOTW information in the Options/External Logs tab as below.



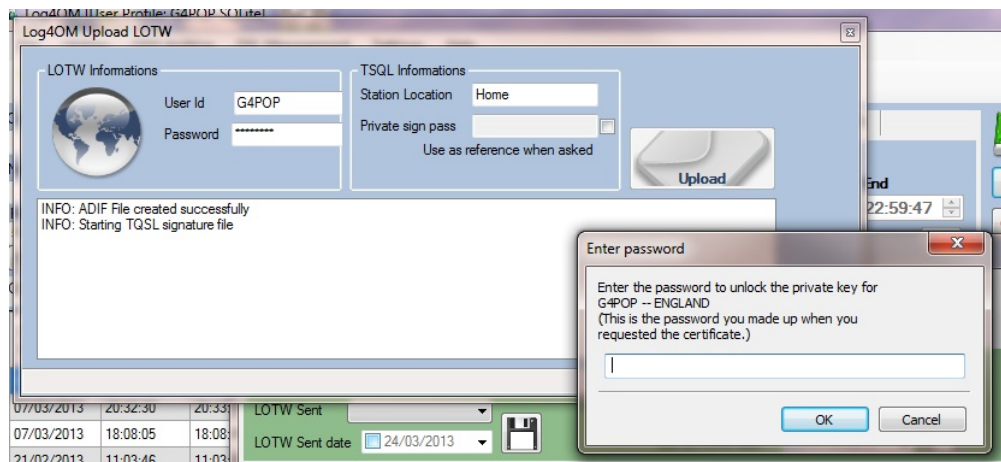
### Important note

The 'Station Location' or 'Name' can be found in the TrustedQSL TQSL program 'Station/Edit locations' window as shown below.



In the example above 'Home' is the 'Station location' or 'name' not 'G4POP-Home'

The LOTW upload procedure is the same as eQSL except that the user must select the 'LOTW' button before selecting the QSO's to be uploaded.



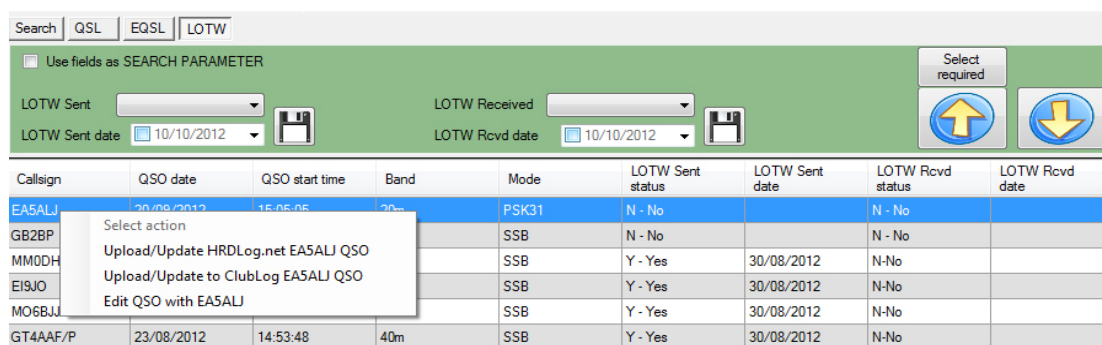
Enter the password and click 'OK' the upload will now complete and the selected QSO's will automatically have the LOTW sent status changed to Y-Yes

Likewise, it is possible to download information from EQSL or LOTW. LOG4OM will automatically update the log.

**Important note:**  
**For EQSL & LOTW upload and download to function correctly the user must have entered his correct user names and passwords in the 'Option' menu.**

### HRDLog and Clublog

Right clicking with the mouse on a QSO allows the user to upload or update to HRDLog or Clublog.





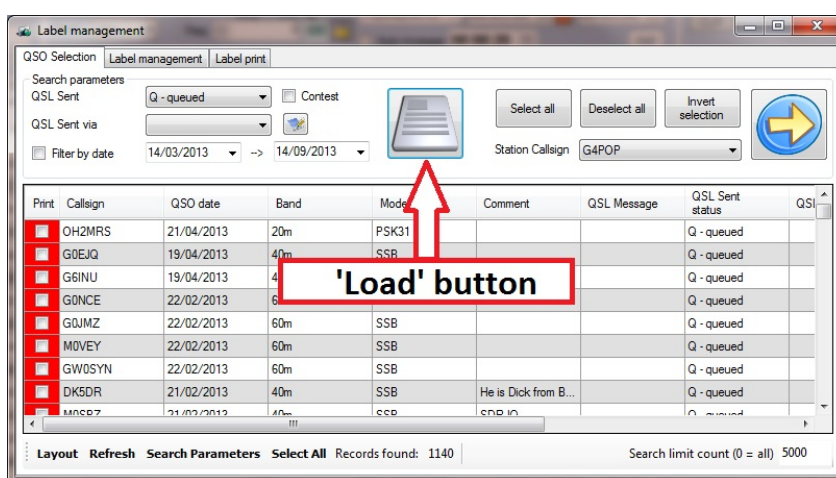
## Menu Bar and Icon Bar



### Label print

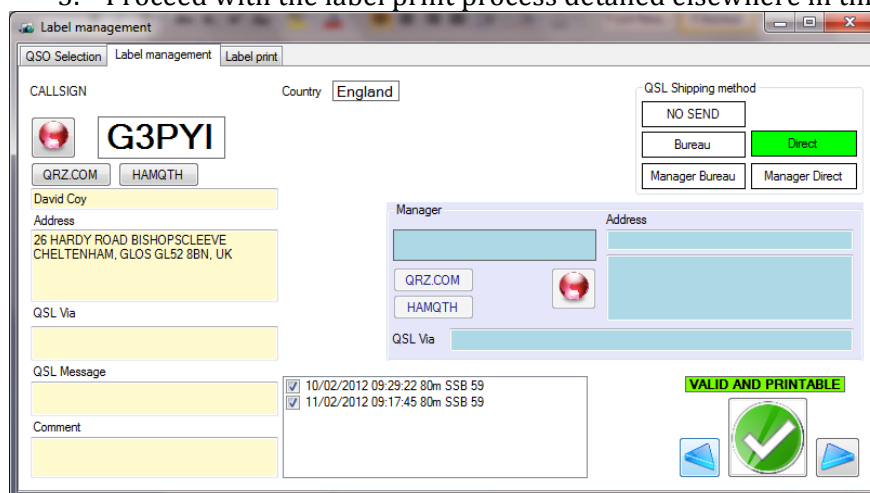
When all incoming QSL cards are recorded as above close the 'QSL Management window and proceed to the 'Label print management' screen.

1. Select 'Q-queued' in the 'QSL sent' field and click the load button (Hard drive icon)

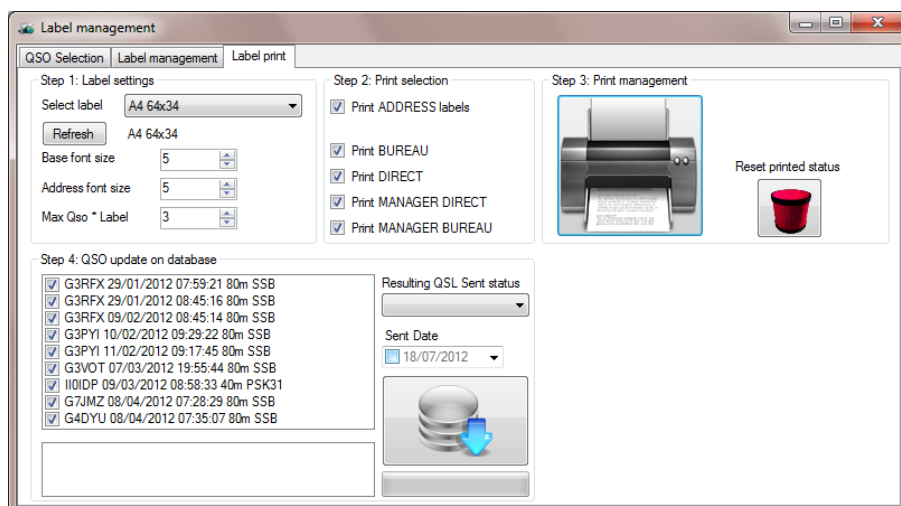


2. Either select the QSO's that are to be printed by checking the appropriate boxes on the left outlined in red or click the 'Select All' button.

3. Proceed with the label print process detailed elsewhere in this manual.



Click on QRZ.COM or HAMQTH to update the operator and QSL manager information and destination (Bureau, Direct, etc.) of each contact. Notes made in the 'QSL Message' field will appear on the printed label. Notes made in the 'Comment' field will be added to the 'Comment' field in the Log Book. Click the Green tick icon (Valid and Printable) to authorise printing. Now select the 'Label print' tab.

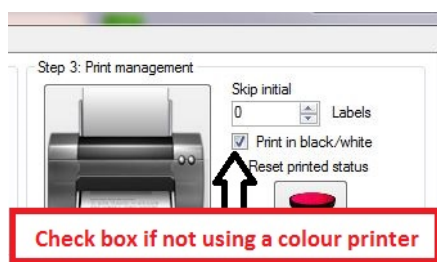


In this window select:

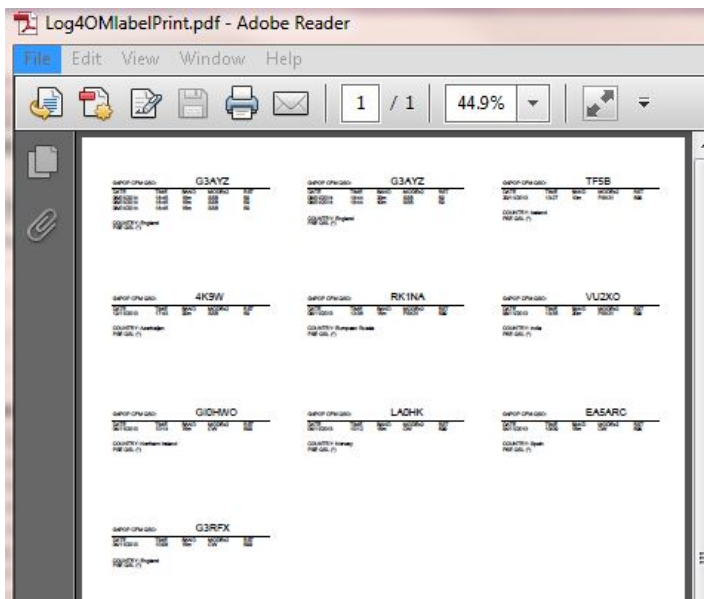
- 1 'Label settings'. Choose the label size required for printing.
- 2 'Print selection' box.' Select item/s to print. **(Ensure that the selections here match the selections made in the previous 'Label Management' window.)**
- 3 'Print management' box'. Select the position of the first label to be printed then click the printer icon to print the selected labels. **(If there is a problem with the print out e.g. the wrong font size was selected it is possible to re-print by clicking the Red bucket icon marked 'Reset Printed status' change the required setting and print again)**



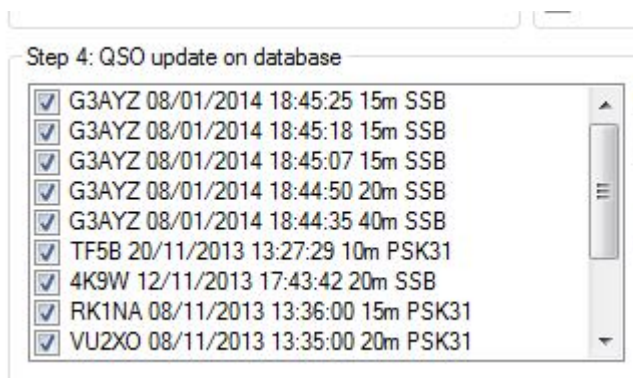
- 4. Check the "Print in black/white" box if not using a colour printer.



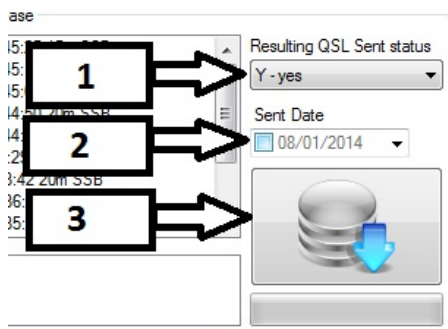
- 5 Click on the printer icon and check that the resulting PDF is exactly as required for printing



- At this point all the QSO's will be displayed in the 'QSO update on database' window - To clear the data from this window, click on the red 'Reset printed status' icon.



- 6 Select...
  1. 'Resulting QSL Sent status' (i.e. Y- yes/N-no/R-requested/Q-queued/I-ignore), to be displayed in the logbook.
  2. Set the date
  3. Click on the blue, downward pointing arrow to update the QSO records.



## Menu Bar and Icon Bar



### QSL Assistant

This form enables the manual editing of a QSO QSL status. It does not print QSL cards!

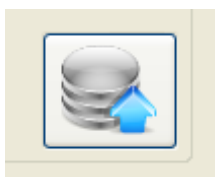
This filter choice loads only the QSOs that are marked 'Requested or Queued', dependent upon requirements.

#### Note

Requested = The user has asked the other station for a QSL card.

Queued = A QSO is waiting for a QSL card to be sent.

Loading from the database is by means of this button:



If the filter has not been applied, the application will highlight the call sign in colour, showing the QSL status

**Queued**

CALLSIGN

**IB0R****Sent**

CALLSIGN

**G4BVB****Not received (N)**

CALLSIGN

**EA5IY****Requested**

CALLSIGN

**JY4NE**

This guards against incorrect data being processed in Log4OM.

### Contact Information

**Informations**

QSL Sent Status      **Requested**     

Address     

ALI YASHRUTI  
P.O. Box 9392  
Amman 11191  
Jordan



QSL informations  
QSL MGR - K3IRV

QSL Message

Comment


QSL received Status     

QSL received Via     

QSL received Date     

QSL Sent status

QSL Sent via  
       Set today as QSL Sent date



This screen displays all the relevant information for the contact except for the QSL received status.

The information can be updated from QRZ.com or HamQth by clicking the relevant button.



The Green globe icon will change to Red if the information is unavailable.

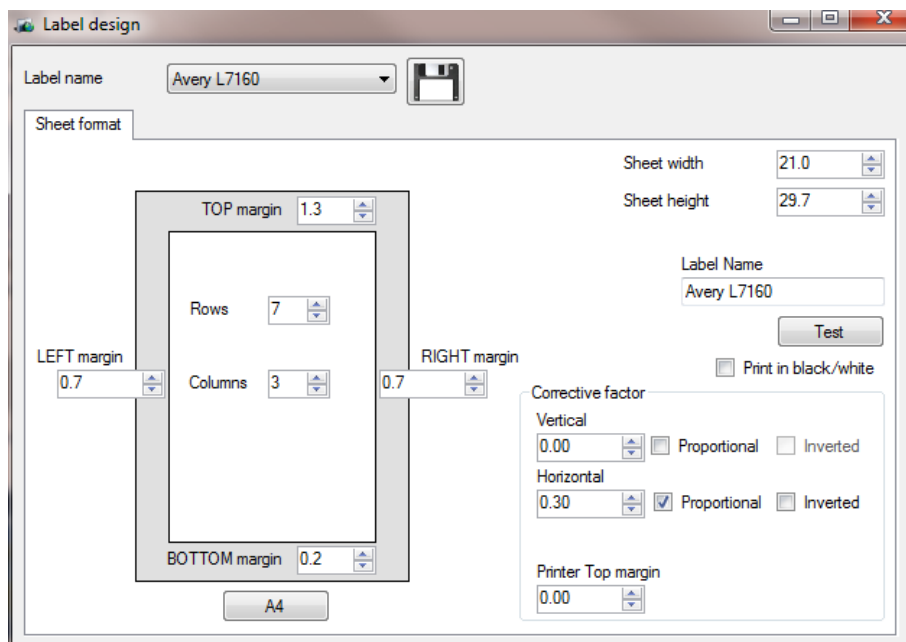
Work flow: For the management of QSLs the workflow standard is as follows:

- Select the filters to load only 'R - Requested' QSOs.
- Load from the chosen database.
- Compile the QSL with the data available.
- Click on the green button.

The program will move automatically to the next QSO.

## Label Design

From the 'Settings' drop down menu, select 'Label Management' to open the 'Label Design' window.



- Enter the specifications for the required label stationary.
- If the user does not have a colour printer then the "Print in black/white" box should be checked.
- Provide a label sheet name
- Save the label by clicking on the floppy disc icon.

To test the label design click the 'Test' button.

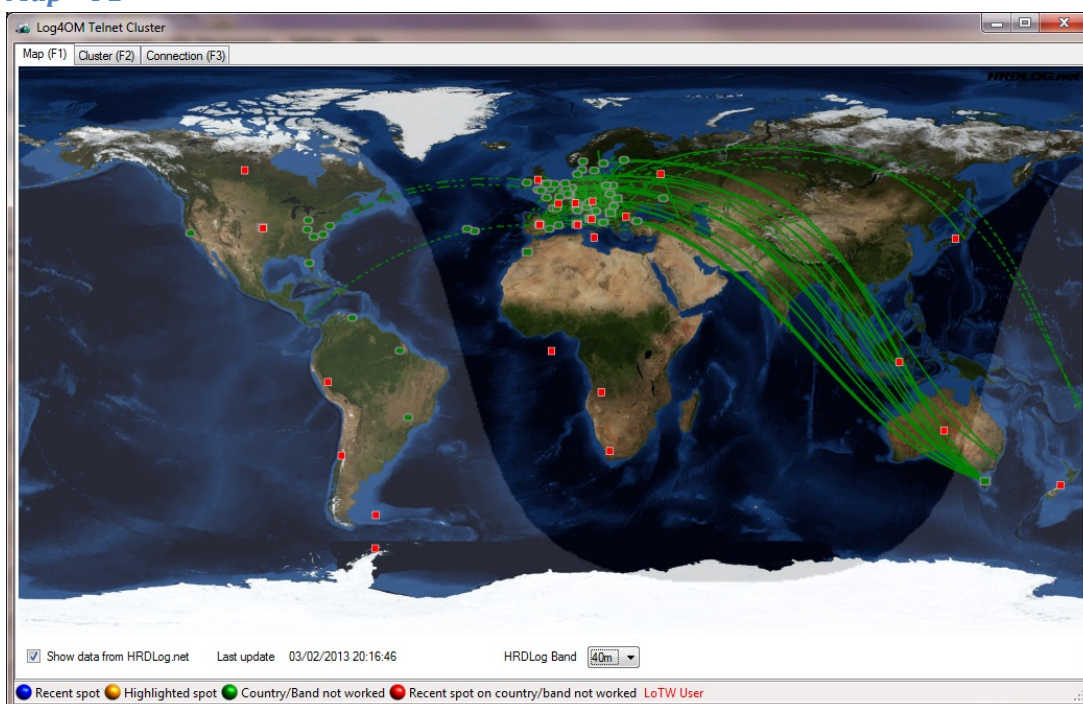
## Menu Bar and Icon Bar



### Utilities

Cluster

### *Map - F1*



The propagation is displayed from the data of HRDLog.net only for the BAND chosen. It is not affected by other cluster settings.

HINT: Closing of the screen doesn't close the cluster connection.



## Cluster - F2

Time	Callsign	Country	Frequency	Note	Band	Mode	Reporter	Rank	Other info	Bearing
1226Z	VP8LP	Falkland Is.	24950.0		12m	PHONE	M1DDV	210	1223Z OH5C: !	216°/36°
1227Z	SM0T	Sweden	18127.0		17m	PHONE	JA8CVH	326		27°/207°
1227Z	HK1MW	Colombia	28001.9		10m	CW	W3LPL	288		259°/79°
1227Z	SV5BYR	Dodecanese	18069.0		17m	CW	UA1WAY	220	1214Z R30R: Mike Greece	118°/298°
1227Z	YB2LSR	Indonesia	21026.8		15m	CW	PA3CWN	281	1213Z R30R: EU-04	70°/250°
1225Z	ON6VL	Belgium	18072.3		17m	CW	NQ2F	328		114°/294°
1227Z	FH4VOS	Mayotte	28480.0	5/9 in kp4:trx bruno.	10m	PHONE	WP4JCF	101	1217Z SV7BVM: thrx new one!!!	135°/315°
1226Z	EA27MI	European Russia	18075.7	rda TO-08 via R6MI	17m	CW	9A2WJ	336		64°/244°
1226Z	PW2D	Brazil	28026.3	cq mm test	10m	CW	DL1HBT	327	1218Z VE3VVF: mm	234°/54°
1225Z	ZX2F	Brazil	28022.0		10m	CW	VE3VTG	327	1216Z W1TO: MM	234°/54°
1226Z	IM0MA	Sardinia	7147.0	EU-041	40m	PHONE	IK1UGX	279	1215Z IZ3NXC: EU-041	150°/330°
1226Z	IM0MA	Sardinia	10127.0	UE-041	30m	CW	IK3ELC	279	1215Z IZ3NXC: EU-041	150°/330°
1226Z	F4FET/P	France	21257.9	GI- IOTA EU-094	15m	PHONE	K1PPR	335	1215Z RJ3DA: eu-094	167°/347°
1228Z	RU27FJ	European Russia	14083.0	trx GSO	20m	DIGITAL	RW9UBP	336		64°/244°
1226Z	EL2RL	Liberia	21225.1	cq cq dx	15m	PHONE	CT2FXR	167	1209Z W3KX: OP EL2DT, DICKSON	194°/14°
1225Z	RV3YR	European Russia	18124.0		17m	PHONE	SV1XV	336		64°/244°
1225Z	CN8KD	Morocco	28020.0		10m	CW	W3LPL	289	1222Z PY4WAS: Test CQMM - www.cqmmx.com	200°/20°
1225Z	BXSAA	Taiwan	18151.0	SRY RADA QRM QRX A WHILE	17m	PHONE	BXSAA	246	1222Z YL2PP: CQ	52°/232°
1224Z	5H1DX/3	Tanzania	21004.0	gqx 1-2 up iota af-075:mkatum	15m	CW	DL&S	178		142°/322°
1227Z	YT1Q	Serbia	14024.7	Croatian CW Contest	20m	CW	EW80B	307		114°/294°
1225Z	FY5PO	French Guiana	21021.0		15m	CW	PA3CWN	236		242°/62°
1225Z	YU1700AST	Serbia	21014.8	yudx	15m	CW	YT5TT	307		114°/294°
1225Z	LU2FE	Argentina	28008.5	cq mm test	10m	CW	DL1HBT	304		230°/50°

This Screen displays the results of the connected Telnet cluster and may be filtered by making the appropriate selections at the bottom right of the screen. i.e:-

Mode

Worked Countries

Radio band

LOTW users

Band

IOTA

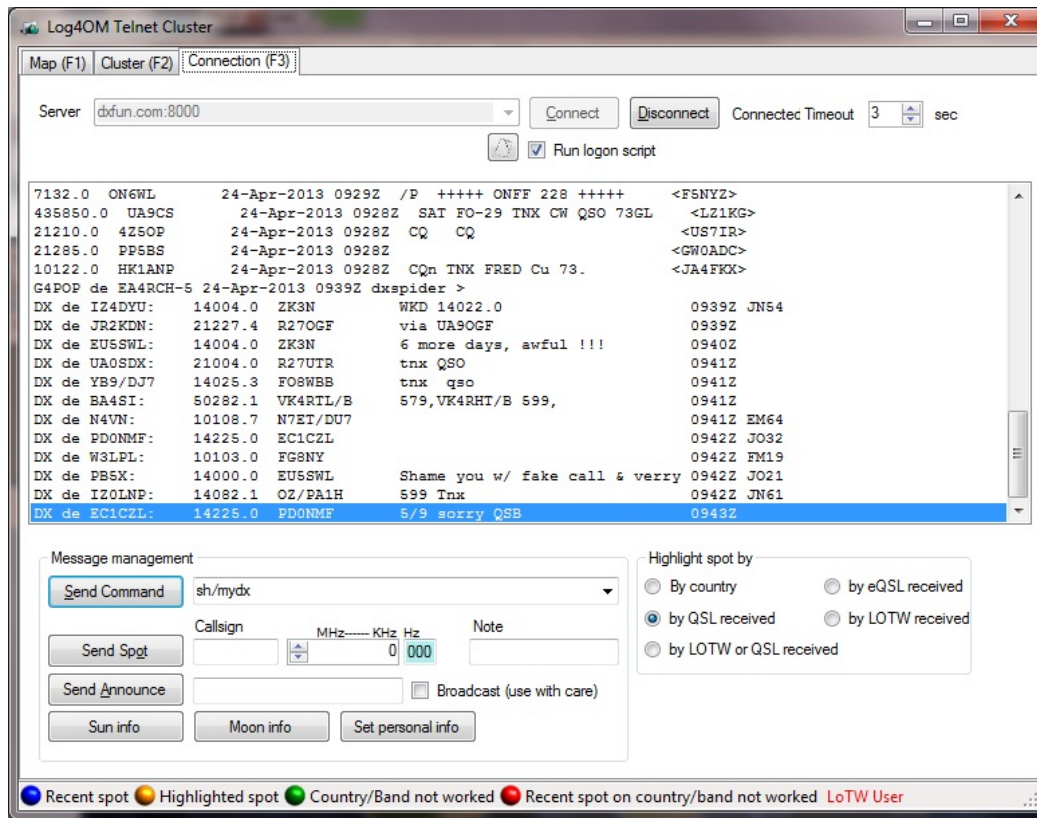
WFF

Contest

Custom filters

**See the section on the Cluster (F9) for a full explanation of the features and set up**

## Connection – F3



It is possible to select a specific cluster, as required by using the Telnet cluster connection screen (shown above). The message management facility can be refined by using the Command Input field or one of the pre-sets. e.g. by country, QSL etc.

The user may also send spots using the fields and buttons provided.

### Maps



Recent spots are indicated with a border around the marker

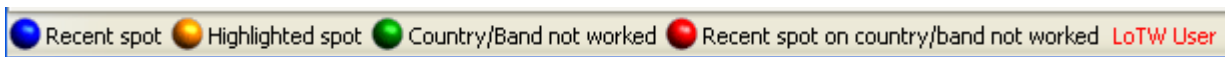


Clicking on a spot marker brings up an information box containing information about the spot and spots nearby. (See below)



Click on an entry in the window to automatically fill the QSO entry fields and set the rigs mode and frequency.

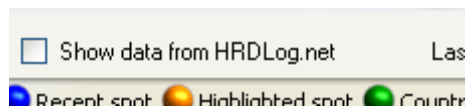
At bottom of the screen there is a key that indicates the status of the spots. (See below)



### Cluster - Integration with HRDLog

Click on the 'Utilities' pull down menu/'Cluster'/'Full Screen Map'(F1).

This window integrates with HRDLog. Checking the box (in the bottom left corner of the screen) will cause the information to update every 15 minutes.



The relevant information shows the latest QSO in a radius of 3000 Km from the stations location.

The window below shows the propagation for the 20 meter band.



Menu. If no particular band is selected it will be in real time for all bands.

HINT: Closing the window does NOT close the cluster connection.

## Menu Bar and Icon Bar



Log4OM Super Cluster

### Super Cluster – F2

	Last QSO	Callsign	Country	Data Quality	Frequency	Band	Mode	Category	Locator	Bearing
	21 Apr 12:36	PA9JO	Netherlands	High	14199	20m	SSB	PHONE	JO21ES	85°/265°
	21 Apr 12:35	LU5DQ	Argentina	Medium	21225.1	15m	SSB	PHONE	FF74DL	230°/50°
	21 Apr 12:35	IZ4GOL	Italy	Poor	14180	20m	SSB	PHONE	JN54TT	129°/309°
	21 Apr 12:35	IZ0GXM	Italy	High	21026	15m	CW	CW	JN61GV	136°/316°
	21 Apr 12:35	VE3CKO	Canada	High	14198	20m	SSB	PHONE	DO87DF	320°/140°
	21 Apr 12:35	VA2ASQ	Canada	High	18100	17m	SSB	DIGITAL	FN35IH	293°/113°
	21 Apr 12:35	PD0MDA	Netherlands	High	14070	20m	DIG	DIGITAL	JO21GR	86°/266°
	21 Apr 12:35	KA4BIX	United Sta...	Poor	18151	17m	SSB	PHONE	EL98IQ	283°/103°
	21 Apr 12:35	ON6VL	Belgium	Spot	18072.3	17m	CW	CW	JO20KQ	108°/288°
	21 Apr 12:35	RX3ZV	European ...	High	21070.005	15m	USER-U	DIGITAL	KO80AO	78°/258°
	21 Apr 12:35	2E0CSO	England	High	14070	20m	SSB	DIGITAL	IO92FS	309°/129°
	21 Apr 12:35	DL1MX	Fed. Repu...	High	14070	20m	SSB	DIGITAL	JO51AQ	85°/265°
	21 Apr 12:34	PY2NX	Brazil	High	24920	12m	SSB	DIGITAL	GG66GJ	222°/42°
	21 Apr 12:34	RV3GM	European ...	High	21070	15m	SSB	DIGITAL	KO92SV	71°/251°
	21 Apr 12:34	W5FPT	United Sta...	Medium	24891.1	12m	CW	CW	EM19FA	301°/121°
	21 Apr 12:33	YB6DE	Indonesia	High	21070	15m	SSB	DIGITAL	NJ84XM	81°/261°
	21 Apr 12:33	SQ9KEL	Poland	High	28120	10m	SSB	PHONE	JO90MG	89°/269°
	21 Apr 12:33	SV1DAR	Greece	High	21070.15	15m	USER-U	DIGITAL	KM17VX	121°/301°
	21 Apr 12:32	SQ9ZAT	Poland	High	24960	12m	SSB	PHONE	KO00CA	89°/269°
	21 Apr 12:32	F4FCE	France	High	21070	15m	SSB	DIGITAL	JN17KM	161°/341°
	21 Apr 12:32	PA2CJH	Netherlands	High	14070	20m	SSB	DIGITAL	JO33AE	62°/242°
	21 Apr 12:31	DF4XX	Fed. Repu...	Poor	14034.501	20m	CW	CW	JO53CN	67°/247°
	21 Apr 12:31	MW0MWZ	Wales	Poor	7186.5	40m	SSB	PHONE	IO82DC	281°/101°
	21 Apr 12:31	LU4ECN	Argentina	Poor	21070	15m		DIGITAL	GF12FB	223°/43°
	21 Apr 12:31	BD6IF	China	Medium	14076	20m	SSB	DIGITAL	OM64FP	52°/232°
	21 Apr 12:31	SV3QUQ	Greece	Medium	21070	15m	USER-U	DIGITAL	KM08UF	124°/304°
	21 Apr 12:30	WM9I	United Sta...	Poor	10122	30m	CW	CW	EM58RP	295°/115°
	21 Apr 12:30	OH6XB	Finland	Medium	21070.23	15m	SSB	DIGITAL	KP34HP	35°/215°
	21 Apr 12:29	G4ISJ	England	Medium	7031.465	40m	CW	CW	IO81WV	279°/99°
	21 Apr 12:29	LY3IV	Lithuania	Medium	14070	20m	DIG	DIGITAL	KO25IF	66°/246°
	21 Apr 12:29	IS0DCR	Sardinia	Poor	28120	10m	SSB	PHONE	JN40RV	147°/327°

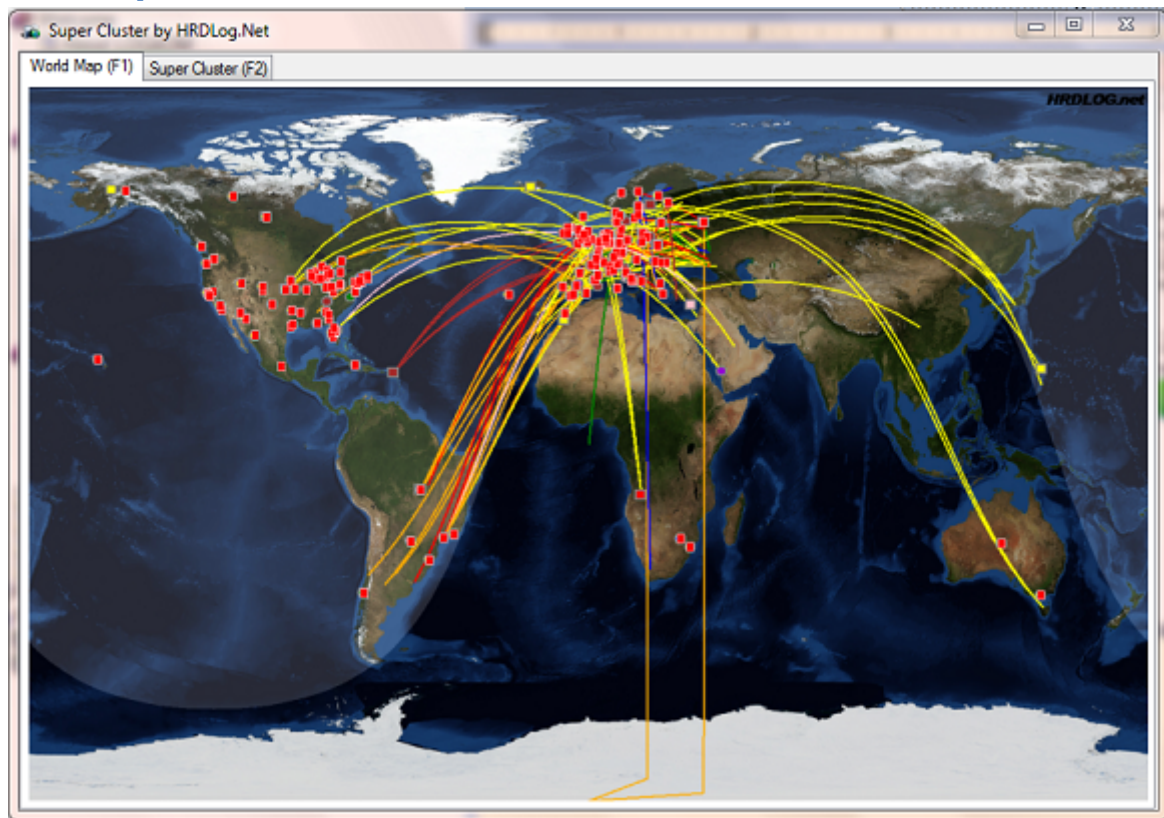
This window displays the calls from HRDLog.net as a list and defines the data quality (column 4) as Excellent, Good, Medium or Poor reliability.

The super cluster quality improves from 'Poor' as each additional contact report is received. This increases the reliability until, in some instances, 'Excellent' is displayed.

'Spot' means there is a spot for this call sign on the official clusters.

The user may filter the data by band, call sign and/or country.

### World Map - F1



This window graphically displays the data from the Super Cluster F2 window. Clicking a spot will display the call information.

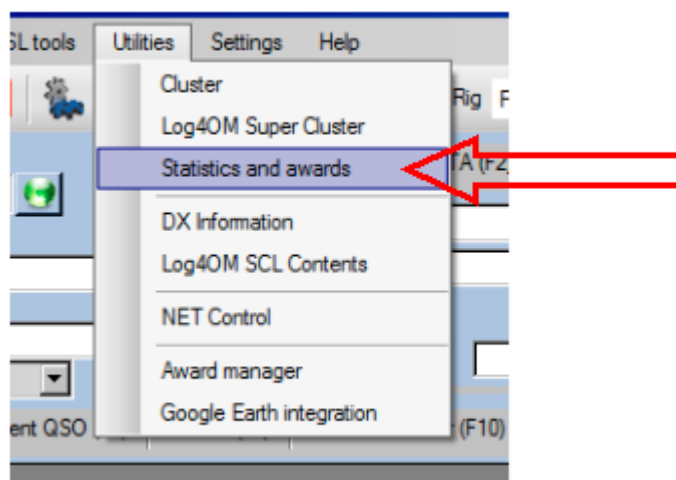
## Menu Bar and Icon Bar



### Statistics & Awards

Click on Utilities in the main window menu and a drop down menu will appear.

Click on Statistics to open the Statistics and Awards Screen.



*It is necessary to understand the processing of QSOs and QSL cards and the recording of such processing within LOG4OM. Therefore, the user should read the next section carefully before proceeding.*

### **Please note**

A QSO can be confirmed by the following methods:

1. Send/Receive a QSL card (paper).
2. Upload and receive an LOTW match for the QSO.
3. Both of the above in parallel.

### **Also note**

1. Updating the LOG4OM status for paper QSL's is a manual operation.
2. LOTW and eQSL status in LOG4OM is automatically updated when an LOTW or eQSL upload or download is done.
3. 'Verified' status is automatically updated by Log4OM when a LOTW match for a QSO is found.
4. The legacy word 'Validated' is not a recognised ADIF parameter therefore 'verified' is now the normal terminology.

**QSL route to an award**

1- **Worked**- A QSO has been made with a entity which has not been granted an award credit.

**Log4OM Status**

(Entered manually by user)

QSL Sent =Yes

QSL Received =No

And/Or

(Log4OM automatic update)

LOTW Sent= Yes

LOTW Received= No

2- **Confirmed**- A QSL card has been received for the QSO. In the case where the QSO was uploaded to LOTW and a match is received, go to 4b

**Log4OM Status**

(Entered manually by user)

QSL Sent =Yes

QSL Received =Yes

3- **Submitted** - A QSL card received for this QSO is submitted for verification by one of the methods below.

- Submit to a card checker
- By Post to the ARRL

4- **Verified**- Either by:

- A QSL card is returned from the card checker- **user sets Log4OM status**
- By post from the ARRL, the verification will take place at the same time as the issue of an award credit - **user sets Log4OM status**
- A LOTW match confirmed by a Log4OM download and the QSL status is automatically set by Log4OM

**Log4OM status**

(Entered manually by user)

QSL Sent =Yes

QSL Received =Verified

(Log4OM automatic update)

LOTW Sent= Yes

LOTW Received= Verified

The QSO/QSL can now be used to apply for award credit for any ARRL DXCC award.



Three other states for the QSO exist:

- **I-Ignore or invalid** – The user does not want to send a QSL, perhaps because it is a local station he works everyday, perhaps the QSO was with a pirate or unrecognized DXCC entity or a card checker rejected the QSO.
- **Q-Queued** – The QSO is marked ready to have a QSL sent at some time in the future, perhaps in a batch.
- **R-Requested** – The other station has requested a QSL but it has not been sent or the user has requested a card from the station worked.

### **Notes about Verification**

To have a QSO “Verified” means the data presented via the card, call, mode, date, etc. are as indicated on the Award application being submitted for award credit.

The ARRL processes the application and determines if the submitted QSO is approved for DXCC credit. If so, the credit is applied. If not approved the QSO is rejected for DXCC purposes.

In the case of LOTW, all “matched” QSOs are automatically verified because to have an LOTW account the station must be approved for DXCC purposes.

### **QSO edit window**

The following are tracked via the Award tab for each QSO:

**Submitted for Award Credit** - All verified QSOs as in item 4 above are submitted for award credit and each QSO is marked for the Award submission status for that award:

- In the case of a mail-in to the ARRL, an application is submitted via Postal mail
- In the case of LOTW, an electronic application is submitted via the Internet from the users account

On the left side of the QSO award tab is where the user records those awards the QSO is being submitted for and a check mark is entered for each award type.

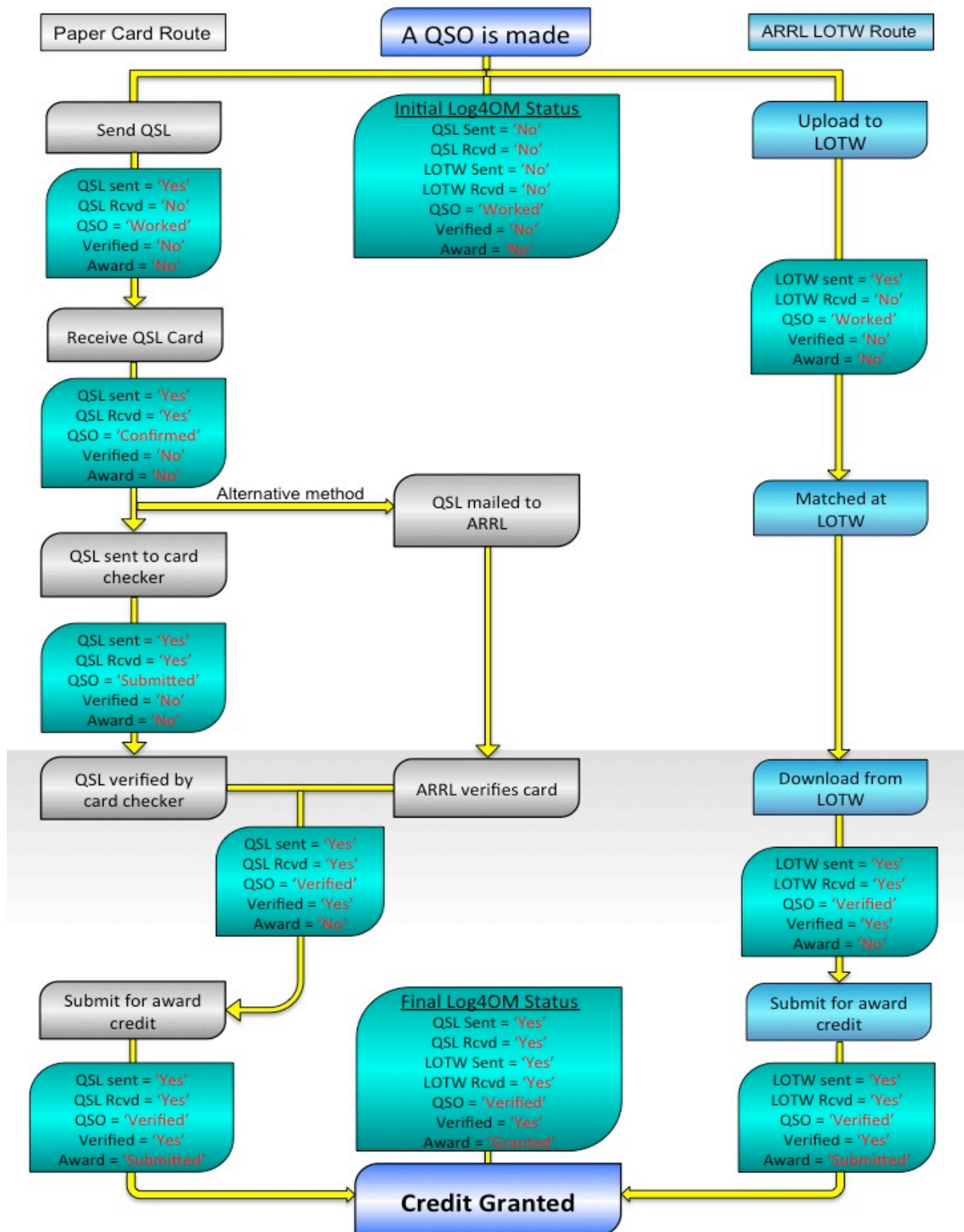
**Credit Granted** - Any submitted QSO that was granted an award credit is marked as Granted for that specific award.

When the QSO has been credited with an award credit, the user will check (Tick) the ‘Award Credited’ box for each award that credit was granted for.

### **Statistics awards tab.**

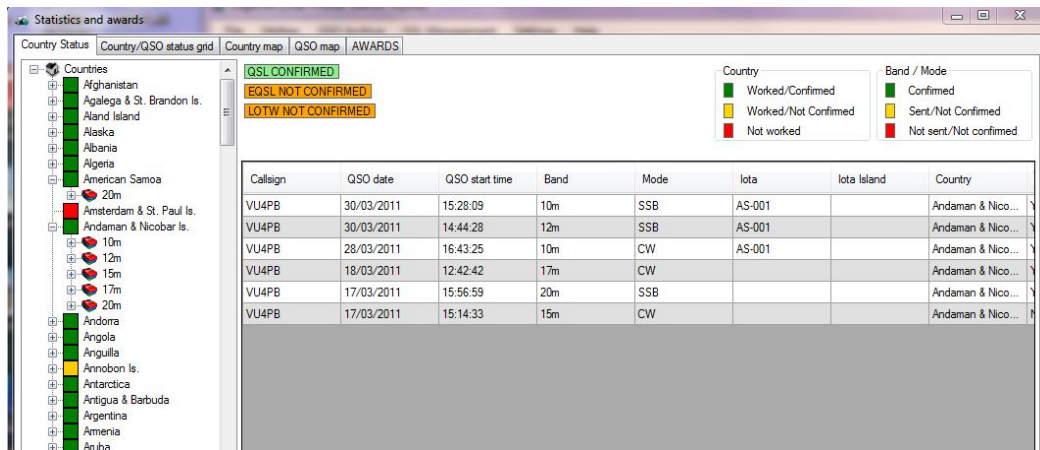
Some of the above actions can be achieved automatically in the Statistics awards tab, please refer to the relevant section of this manual.

### QSO to DXCC Award



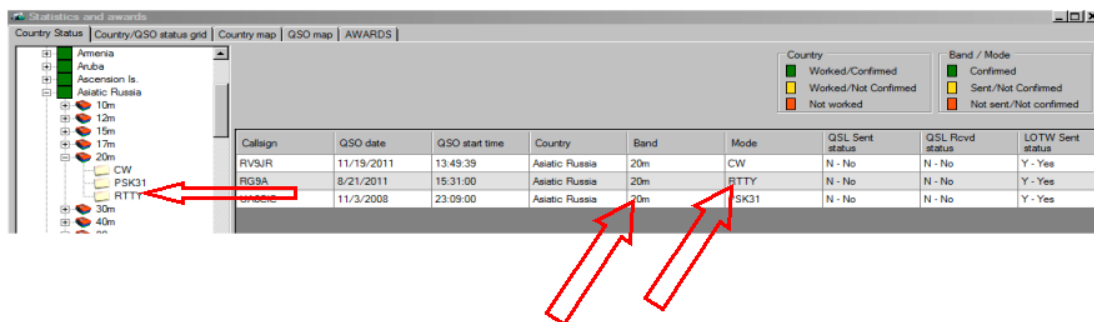
Country Statistics:

The display is in the form of a tree. To open it, click on 'Countries' as indicated below:



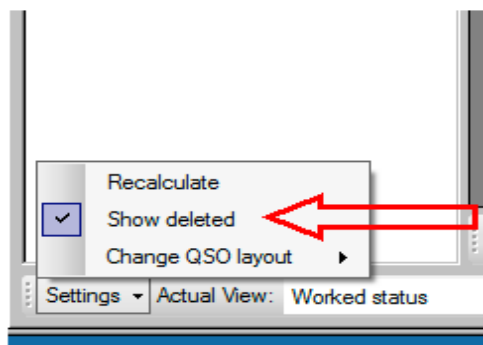
Each country listed can be expanded by clicking on the + sign next to the country name. This will show the bands on which the user has worked the country. Click on a band to open it and see the modes worked for the country/band.

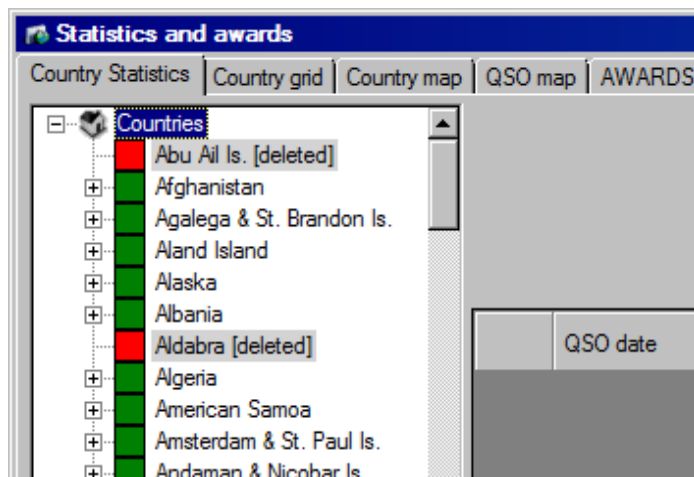
Click on a mode to display the QSOs that comprise the Country/Band/Mode.



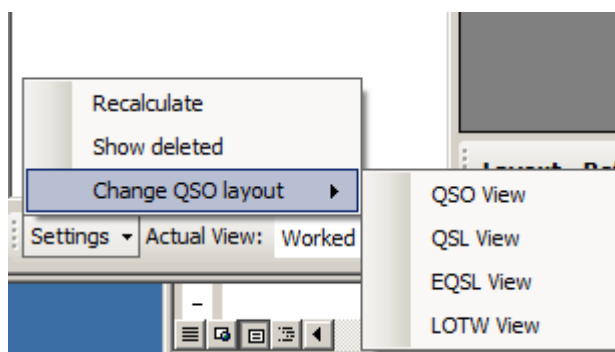
In the above example, the display shows the QSO for Asiatic Russia, RTTY on 20 meters.

When the 'Country Statistics' display opens, it shows all 'Current' countries. To include 'Current' plus 'Deleted' countries, select 'Show Deleted' from the selections at the bottom of the window.

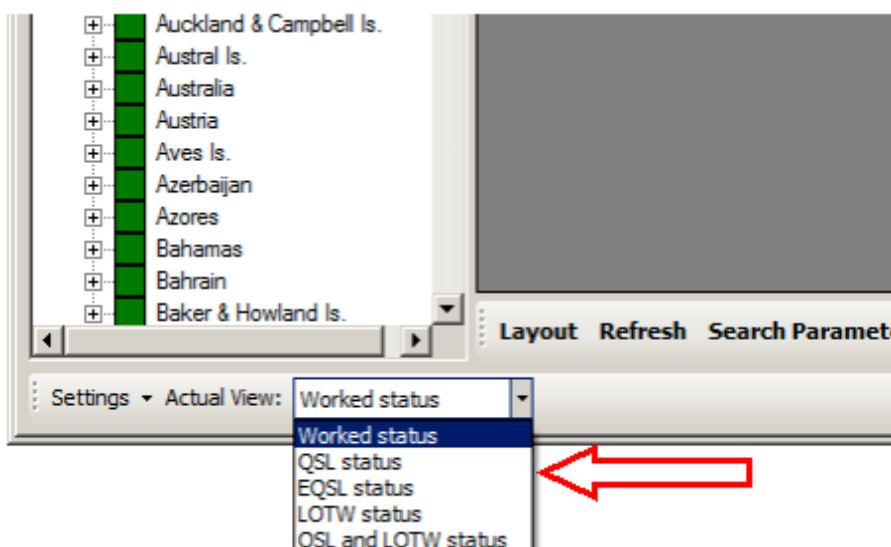




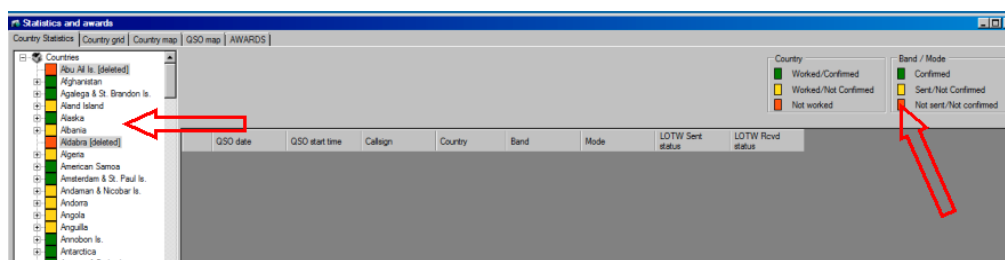
The displayed QSOs can be viewed in one of four (4) different views:



Selecting 'Actual View' displays various QSL status methods. Selecting one of them will cause the 'tree' to change, reflecting the updated status for each country for the selected QSL method.

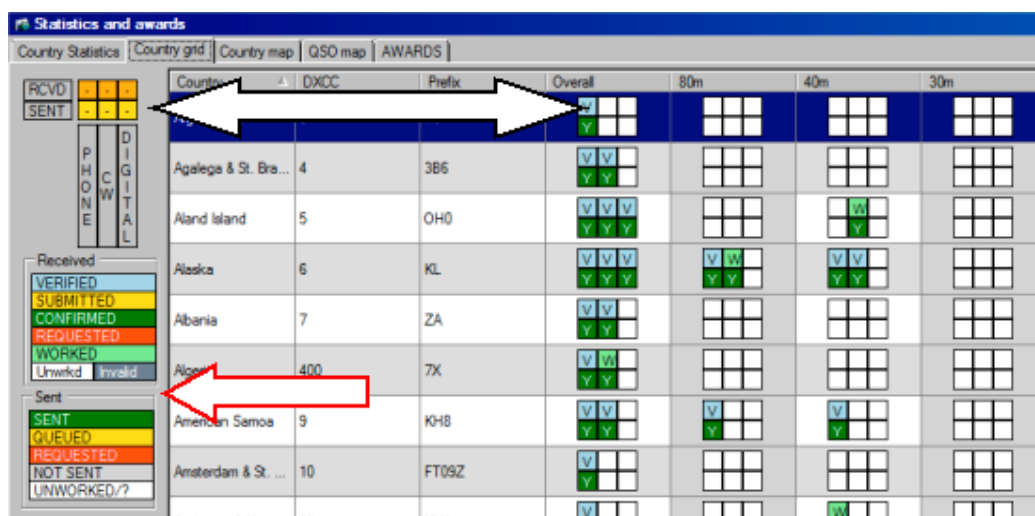


The colour coding legends are shown in the top, right portion of the display:



### The Country Grid

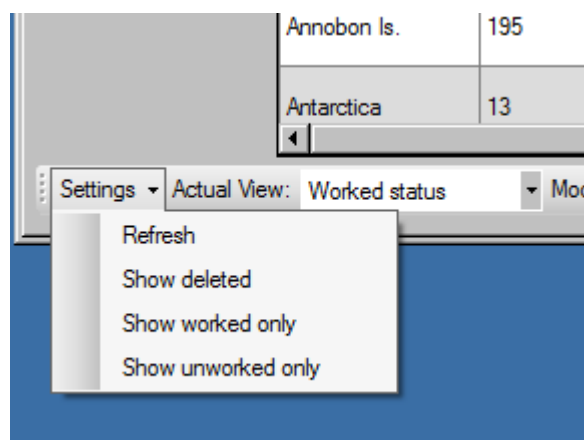
Click on the Country Grid tab to open the following window:



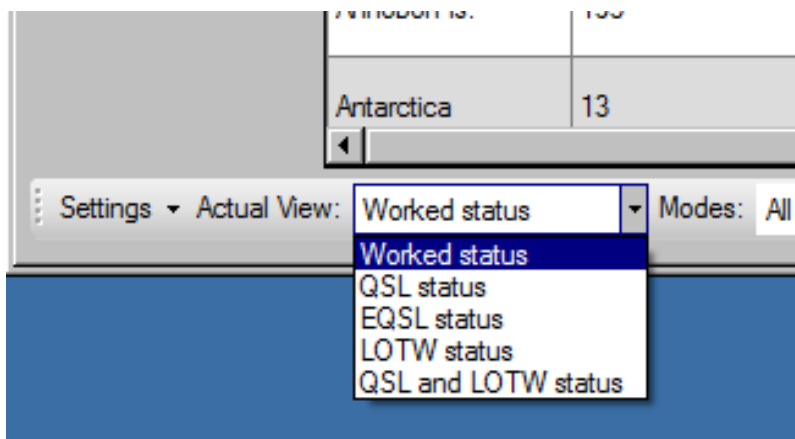
The legend in the top left portion of the display (upper arrow) shows the orientation of the cell column and row boxes.

The legend in the bottom left (lower arrow) depicts the colour codes for the QSL Sent and Received status, as displayed in the cells for each country.

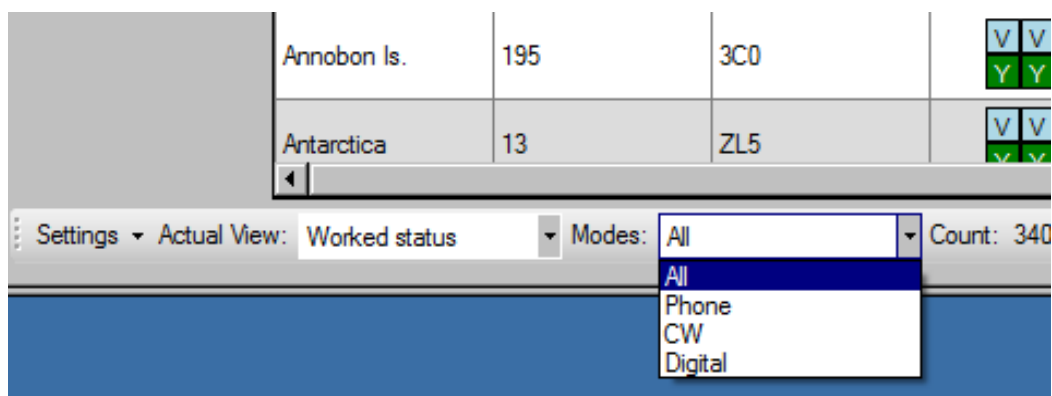
The user can select the contents to be displayed:



From the 'Actual View' drop-down selection, select the desired QSL method to be displayed:



From the 'Modes' drop-down selection, select the desired Mode to be displayed:



About ARRL DXCC awards:

The DXCC program issues awards based on modes or bands. These awards can be obtained by providing proof of the QSO to ARRL.

There are two ways in which proof can be provided of a QSO.

- 1) By having a paper QSL card (or cards) and submitting it (or them) to ARRL by post or by sending it (or them) to an authorized ARRL card checker for consideration of validity for use in an award request.
- 2) By having a QSO registered and matched in LOTW by both parties participating in the QSO.

### Paper QSLs

On the receipt of a paper QSL, it is necessary to mark it as 'confirmed' in either an imported ADIF or in Log4OM.

The status of 'Worked' countries, by band and mode, is shown in the DXCC Awards section of LOG4OM. To see this, click on 'Utilities' drop down Menu, then select 'Statistics and Awards'.

Countries that have a 'CONFIRMED' status are shown in Purple, making it easy to see the countries that require 'Card Checked Verification' in preparation for submission for an award.

### Verification

The first step is to 'validate' the QSL. This involves entering the details of each QSO on the appropriate submission form and gaining the validation of an ARRL card checker.

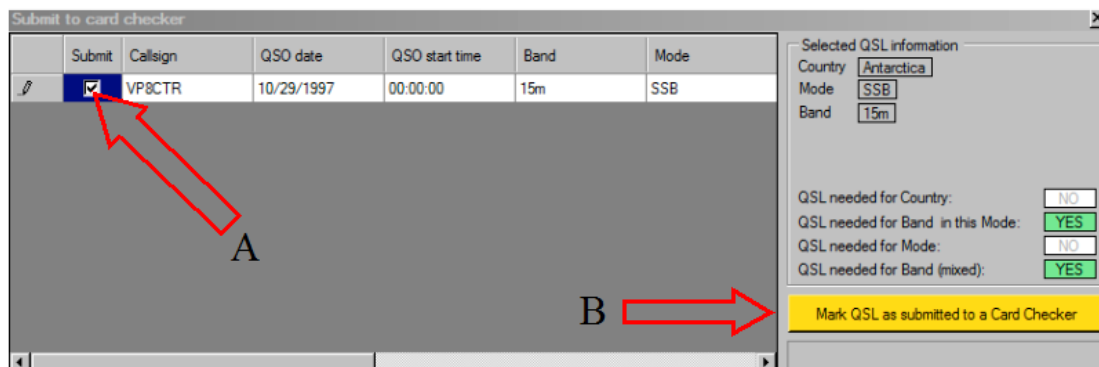
This phase is called 'submission to a card checker', and can be achieved by clicking on a country/band cell in the 'Awards' window.

The screenshot displays the 'Statistics and awards' window in the ARRL DXCC software. The main area is a grid showing worked countries across various bands (80m to 10m) and modes. A red arrow points to a purple cell in the 15m band for the call sign VP8CTR, indicating a confirmed QSO. A dialog box titled 'Submit to card checker' is open, showing the details of the selected QSO: Call sign VP8CTR, QSO date 10/29/1997, QSO start time 00:00:00, Band 15m, and Mode SSB. The dialog includes a 'Submit' button and a 'Mark QSL as submitted to a Card Checker' button.

Country	DXCC	Prefix	80m	40m	30m	20m	17m	15m	12m	10m	Call	QSO	QSO Status
Angola	401	D2				G	W	W	G	G	D2EGH	Date: 19931211 ...	Credit Granted
Anguilla	12	VP2E		G	G	G	G	W	G	G	VP2EEB	Date: 19971127 ...	Credit Granted
Annobon Is.	195	3C0					G	G			3C0R	Date: 20000511 ...	Credit Granted
Antarctica	13	ZL5	G		W	G	G	C	G	G	VP8CTR	Date: 19970718 ...	Credit Granted
Antigua & Barbuda	94	V2	G	G	G	G	G	G	G	G	V26F	Date: 20090308 ...	Credit Granted
Argentina	100	LU	G	W	G	G	W	W	V	G	LU6FL	Date: 20040521 ...	Credit Granted

Click Country/Band cell to open the "Submit to card checker" window as in above.

Once the 'Submit' boxes for the cards are checked, click on the Yellow 'Mark QSL as submitted to a Card Checker' button. Then send the relevant cards to a card checker.



A= Check box to mark QSO for submission for checking

B= Click to mark the selected QSOs as "submitted"

When a QSL is marked as 'Credit submitted' the overall status of the country/band in the Awards screen turns from CONFIRMED to SUBMITTED (gold colour). This indicates that a card checker is checking the QSL.



Albania	7	ZA		v	C	C	C	C	C	W		
Algeria	400	7X			C	C	C			W		
American Samoa	9	KH8					s				KH8/N9YU	Date: 20091001 ...
Amsterdam & St. ...	10	FT09Z										
Andaman & Nico...	11	VU4						C	C	W	C	C
Andorra	203	C3		v	v	W	W	W	W	W		

A list of QSL cards to be sent for submission to a 'Card Checker' can be exported for printing by selecting 'Export to ADIF' and then selecting 'Submitted to card checker'.

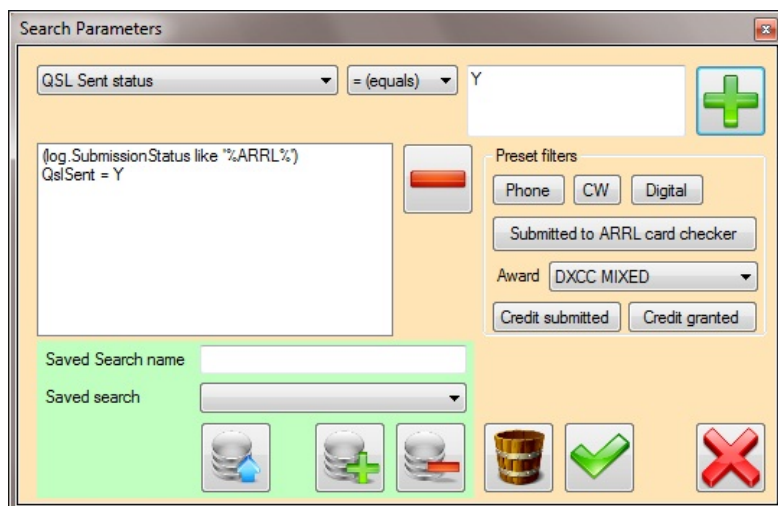
When the QSL has been returned, change the QSO status from 'QSL SUBMITTED' to 'QSL Verified'. The information by the side of the country will change to 'VERIFIED'.

### *To change 'Submitted' to 'Verified'*

In the 'QSO Archive' menu select 'Archive Management'. In 'Search Parameters', at the bottom of the window, add 2 filters.

- Click the 'Submitted to ARRL card checker' button
- Then select 'QSL Sent status' from the drop down list at the top left.
- Search type should be =(equals)
- Enter a value of 'Y'
- Click the  button
- Click the  button
- Click 'Search' at the top of the window





Click 'Search'. A list of submitted QSOs will appear in the main QSO Archive window.

Check the 'Enable updates' box at the top right of the Archive window

Highlight the entries to be updated from 'Submitted' to 'Verified' and click the 'Field Update' toolbar button.

In the 'Field to update' list, select 'QSL Rcvd status' and, in the 'Value' box, insert 'V' (without the inverted comas). Then click the 'Update' button – When complete, close the window and exit the 'QSO Archive' window. These QSLs can now be used to claim an award.

### ***What happens if LOTW is also used?***

Log4OM marks 'Verified' by checking the LOTW and QSL states. LOTW validation has a higher priority than a Verified QSL card and will be used for a claim if the entity has both a verified LOTW match and a Verified QSL card.

### ***LOTW Verification***

LOTW confirmed QSLs are automatically 'Verified'. e.g. 200 QSLs with Italy are 'Confirmed' (but nothing is Verified by a card checker) and only one QSO with Italy is 'Verified' with LOTW. Therefore, the overall status for the country/band/mode, related to the QSO, becomes 'Verified' and no further card check is required.

### Selecting QSOs for award submission

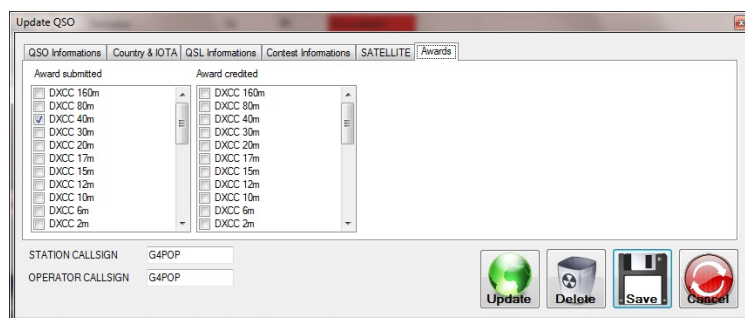
In the 'Awards' window select the required award from the drop down list 'Select Award'.

The screen now shows previously Verified QSOs for the selected award (Verified with checked paper QSLs or with LOTW confirmed QSOs) and shows the countries that are eligible for any particular DXCC award.

The image below displays a list of QSLs that qualify for the selected DXCC award.

Country	DXCC	Prefix	80m	40m	30m	20m	17m	15m	12m	10m	Call	QSO	QSO Status	LOTW
Afghanistan	3	T6						G			YAST	Date: 20020629...	Credit Granted	<input checked="" type="checkbox"/>
Agalega & St. Bra...	4	3B6				G	G	G			3B6RF	Date: 20010512...	Credit Granted	<input checked="" type="checkbox"/>
Aland Island	5	OH0		W		G		G	G		OH0-DL5FF	Date: 19950613...	Credit Granted	<input type="checkbox"/>
Alaska	6	KL	G	G	W	G	G	G	G		KL7KJ	Date: 19941204...	Credit Granted	<input type="checkbox"/>
Albania	7	ZA				G	W	W			ZA1AJ	Date: 19950919...	Credit Granted	<input type="checkbox"/>
Algeria	400	7X				G		W	W	W	7X2LS	Date: 19931006...	Credit Granted	<input type="checkbox"/>
American Samoa	9	KH8	G	G	W	G	G	G			K6DGV	Date: 19950204...	Credit Granted	<input type="checkbox"/>
Amsterdam & St...	10	FT09Z				G		G			FT5ZH	Date: 19981127...	Credit Granted	<input checked="" type="checkbox"/>
Antarctica & Nic...	11	VU4		W							VU4RNO	Date: 20041213...	Credit Granted	<input type="checkbox"/>
Andorra	203	C3				G	G	W		W	C3IOF	Date: 19940426...	Credit Granted	<input type="checkbox"/>
Angola	401	D2				G	W	W	G	G	D2EGH	Date: 19931211...	Credit Granted	<input type="checkbox"/>
Anguilla	12	VP2E	G	G	G	G	G	W	G	G	VP2EEB	Date: 19971127...	Credit Granted	<input checked="" type="checkbox"/>

The awards tab of the QSO edit window will now reflect the submission status of this award.



### Award Granted

When the paper award arrives, mark all used QSLs as 'Credit Granted' by selecting the award from the 'Select Award' menu.

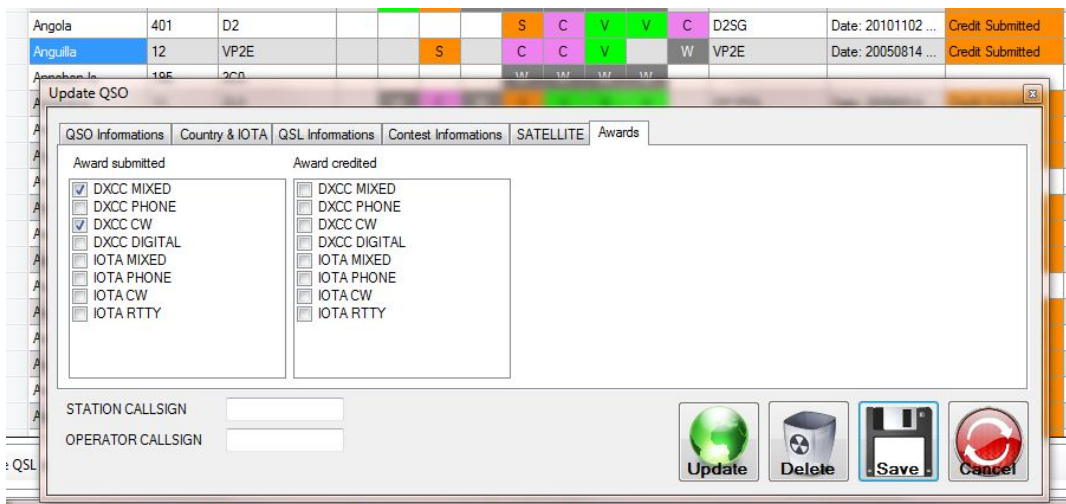
Select 'Credit Submitted QSO' from the "Actions' list and click on 'Mark Submitted as granted'

This indicates that the related QSOs (confirmed by paper or LOTW) have been successful in the application for that award. A similar procedure is used for RSGB awards, except for the 'submit to card checker' part that is not enabled.

If a lack of verified countries appears after importing an ADIF from another program, it is possible that the imported file is at fault and contains errors.

In this eventuality, it is advisable to make a full download of the LOTW archive from the ARRL using the LOG4OM QSL management facility by setting the 'from date' to the oldest QSO in the archive. This will refresh the information and provide updated information of the user's QSO status in the award world.

Double left clicking an entry provides an edit window where the award status can be viewed and edited.



### Updating Award Credit Status

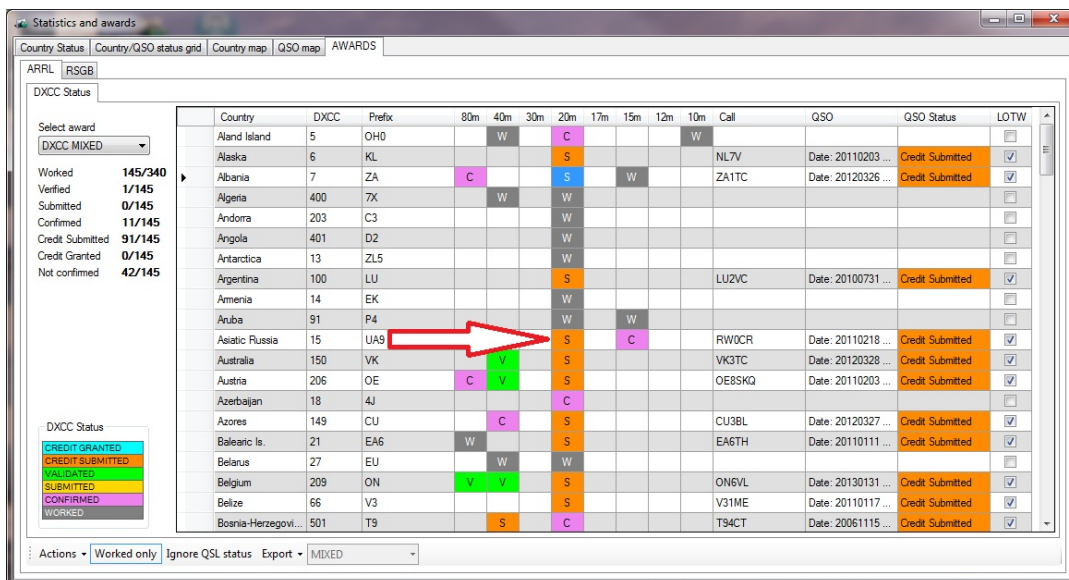
There are two methods for updating the status of a QSO award credit in Log4OM.

#### IMPORTANT NOTE.

*The QSL status must be 'Verified' for the QSO to be 'Submitted' or 'Credited' for an award!*

#### Method 1

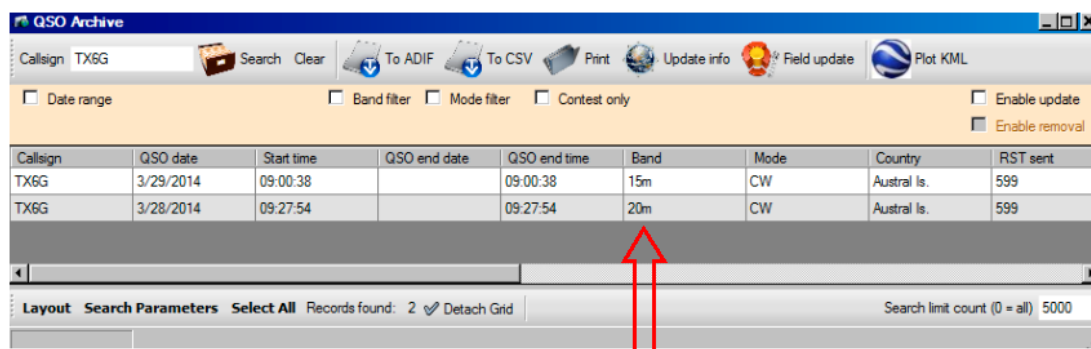
If the QSO's in Log4OM are already marked as submitted in the statistics screen as below.



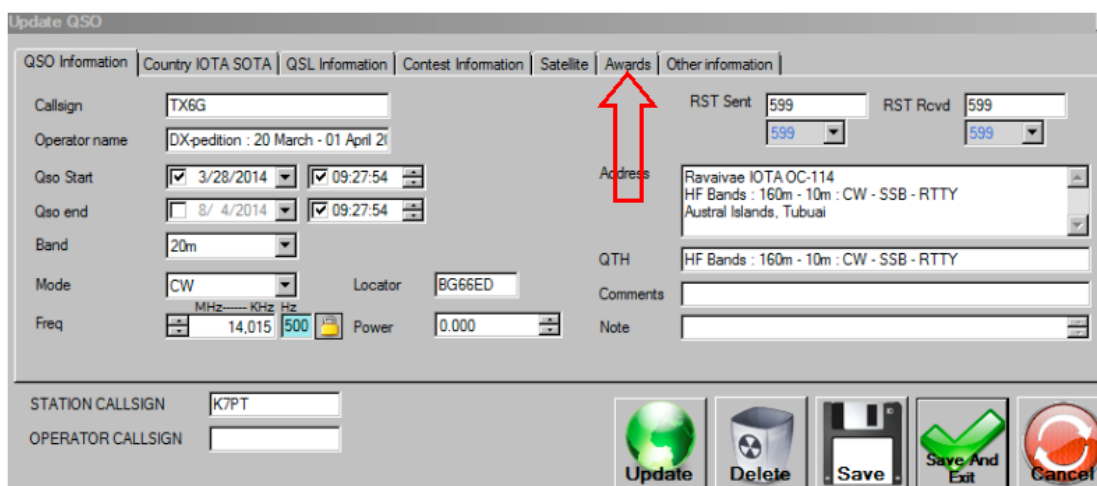
Click the submitted marker as shown to open the QSO edit window

## Method 2

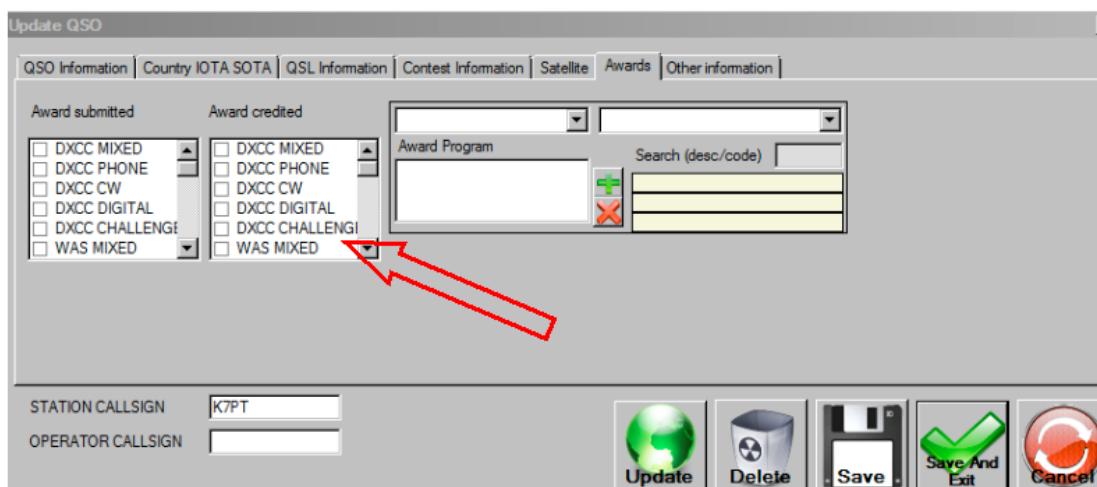
If the QSO's are not already marked submitted in Log4OM then in the QSO Archive manager window search for the call sign for which credit has been granted as shown below.



Double click the required QSO from the search list to open the QSO edit window as shown below.



In the edit window click on the awards tab.



Check the box for the award credit has been granted followed by 'SAVE AND EXIT'

### *DXCC Challenge Award*

The DXCC Challenge Award is earned by working and confirming at least 1,000 DXCC band-points on any Amateur bands, 160 through 6 meters (except 60 meters).

Certificates are not available for this award however, there is a distinctive wall plaque available to display your achievement.

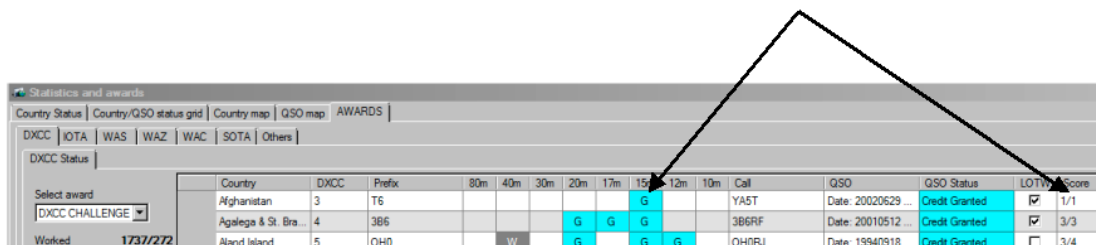
Plaques can also be endorsed in increments of 500 additional band points.

Deleted entities do not count for this award.

All contacts must be made after November 15, 1945. QSOs for the 160, 80, 40, 30, 20, 17, 15, 12, 10 and 6 meter bands qualify for this award. Bands with less than 100 contacts are acceptable for credit for this award and you do not have to have an active award on a band for it to qualify.

A point is gained for each band/country with only one point per band/country, i.e. Italy on 15M CW, Digital and Phone results in only one point for Italy.

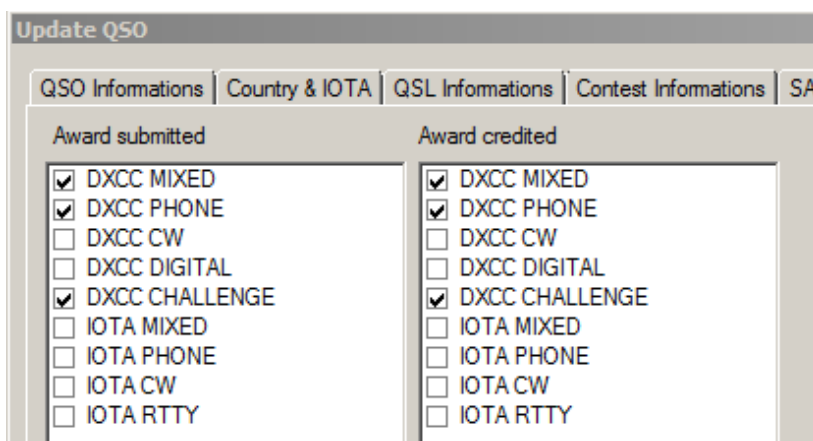
### *Challenge Award display:*



Country	DXCC	Prefix	80m	40m	30m	20m	17m	15m	12m	10m	Call	QSO	QSO Status	LOTW	Score
Afghanistan	3	T6						G			YA5T	Date: 20020629 ...	Credit Granted	<input checked="" type="checkbox"/>	1/1
Agalega & St. Bra ...	4	3B6					G	G	G		3B6RF	Date: 20010512 ...	Credit Granted	<input checked="" type="checkbox"/>	3/3
Aland Island	5	OH0		W				G	G	G	OH0RU	Date: 19940918 ...	Credit Granted	<input type="checkbox"/>	3/4

In this example, a Challenge Award credit has been granted on 15 Meters and is 1 out of 1 possible Challenge points for Afghanistan.

### *Setting the Challenge award status for a QSO:*

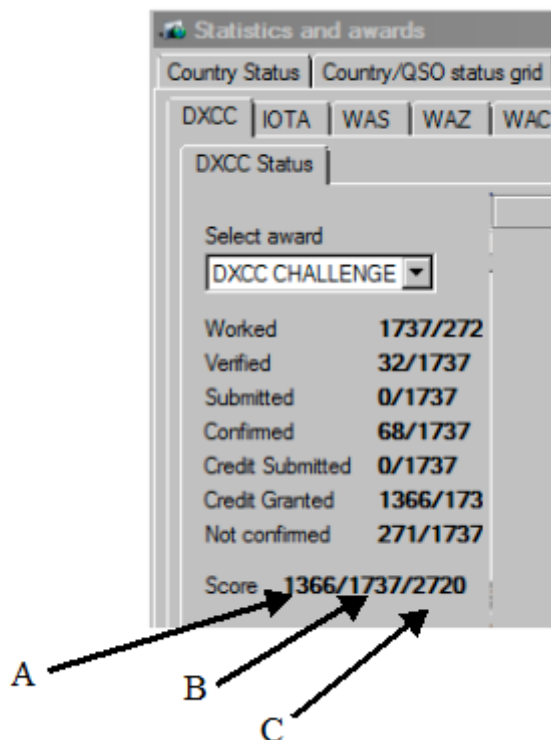


Update QSO				
QSO Informations	Country & IOTA	QSL Informations	Contest Informations	SA
Award submitted		Award credited		
<input checked="" type="checkbox"/> DXCC MIXED	<input checked="" type="checkbox"/> DXCC PHONE	<input checked="" type="checkbox"/> DXCC MIXED	<input checked="" type="checkbox"/> DXCC PHONE	
<input type="checkbox"/> DXCC CW	<input type="checkbox"/> DXCC DIGITAL	<input type="checkbox"/> DXCC CW	<input type="checkbox"/> DXCC DIGITAL	
<input checked="" type="checkbox"/> DXCC CHALLENGE	<input type="checkbox"/> IOTA MIXED	<input checked="" type="checkbox"/> DXCC CHALLENGE	<input type="checkbox"/> IOTA MIXED	
<input type="checkbox"/> IOTA MIXED	<input type="checkbox"/> IOTA PHONE	<input type="checkbox"/> IOTA MIXED	<input type="checkbox"/> IOTA PHONE	
<input type="checkbox"/> IOTA PHONE	<input type="checkbox"/> IOTA CW	<input type="checkbox"/> IOTA PHONE	<input type="checkbox"/> IOTA CW	
<input type="checkbox"/> IOTA CW	<input type="checkbox"/> IOTA RTTY	<input type="checkbox"/> IOTA CW	<input type="checkbox"/> IOTA RTTY	
<input type="checkbox"/> IOTA RTTY		<input type="checkbox"/> IOTA RTTY		

- 1) Select the desired QSO from the QSL Management window
- 2) Check either or both of the DXCC Challenge check boxes for submitted or credited which ever is true.
- 3) Save and exit the Update QSO window
- 4) The change will now be reflected in the DXCC Challenge display

### *Challenge Award Total Score:*

The totals for this award are displayed in the left side of the screen:



A= Points Credited

B=Possible Points if submitted

C=Maximum Points Possible (Number of bands user has displayed times 340 current entities)

### *WAS (Worked all States) Award*

Prefixed call signs worked may on occasion present incorrect information with regard to the state determination.

#### **Examples.**

KH6/K7PT will not resolve the state as HI (Hawaii)

KL7/K7PT will not resolve the state as AK (Alaska)

K/G4POP will not resolve a state

This is because the prefixes KH6/, KL7/, K/ can only define the country there is no source for this type of prefix that provides the state information.

The only way that the state information could be derived would be in the case of a DXpedition registered with the DX online sources which would automatically be included in the Log4OM special call list or the Clublog exceptions file. However in the examples shown above it is unlikely that they would be listed as DXpeditions.

When a prefix is incorrectly used as a suffix e.g. K7PT/KH6, the same problems exist.

### **WAS Missing or incorrect state information**

Where the state(s) field for a QSO/QSO's is/are empty they will be identified in the top row of the WAS award matrix titled "State not set"

State	Name	80m	40m	30m	20m	17m
*** State not set					W	
AK	Alaska				V	

The user can click on this QSO in the "State not set" row to display the QSO/QSO's for editing.

If a state has been entered incorrectly and displays characters other than the standard state abbreviation's the bottom row of the WAS list will show an extra row named "Not found"

State	Name	80m	40m	30m	20m	17m
WY	Wyoming		V			
PH	*** NOT FOUND ...		C			

The user can click on this QSO in the "Not found" row to display the QSO/QSO's for editing.

#### **Please Note:**

**Any incorrect state entries which generate the extra line State not found will be added to the totals shown at the top of the WAS award screen.**

WAS Status

Select award  
WAS MIXED

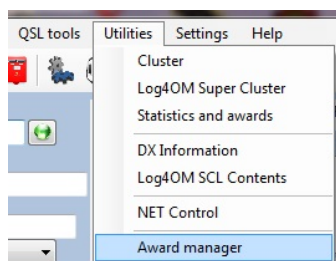
Worked **46/51**

## **Awards Manager**

The new awards manager enables users to construct and modify awards – The main awards (DXCC, WAZ, WAS, IOTA, SOTA & WAC) are hard coded and cannot be modified by the user.

### **Award construction.**

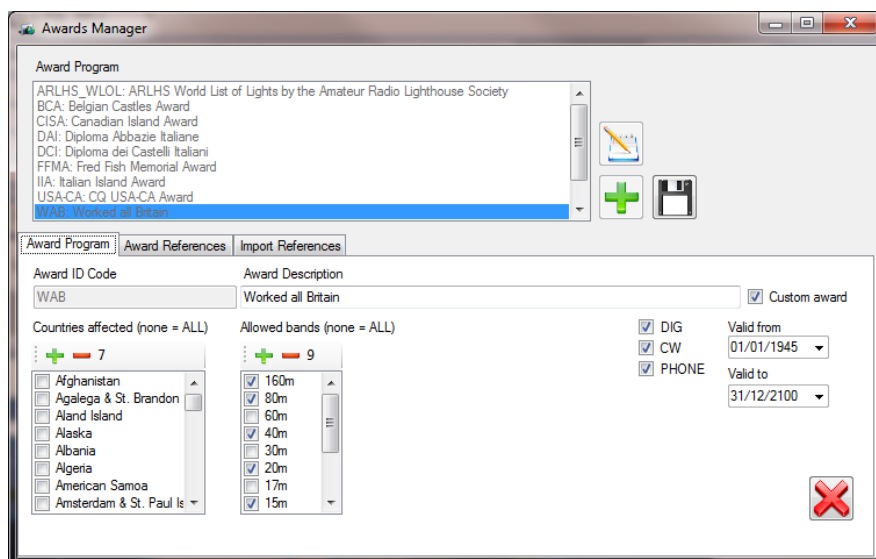
An award definition XML file contains two elements; these elements can be added or modified by using the 'Award Manager' that resides in the "Utilities" menu.



1. A "Header" which defines the characteristics of the award e.g. Modes and bands, DXCC that are valid and start and end dates – These parameters are set in the Awards Manager "Awards Program" tab
2. The "Data" which is the award references e.g. National Grid squares, castle references, lighthouse numbers etc., etc., etc., - These Parameters are imported and edited in the

## Awards Manger “Import References” and “Award References” tabs

*The structure in the XML file is user editable but is not recommended.*



### “Header” Characteristics

The “Header” of the award contains the basic information about the award.

1- **Award code**: e.g. USA-CA, DAI, IIA, WFF, ARLH\_WLFF, WAB

This identifies the award.

2- **Award Description**: The award name in full e.g. “Worked all Britain”

3- **Countries/DXCC**: The countries valid for the award. e.g. The countries valid for Worked all Britain are England, Scotland, Wales, Northern Ireland, Isle of Man, Guernsey & Jersey.

*e.g. The Italian Island Awards is only displayed for selection when the call sign entered is for an Italian or Sardinian station.*

If a Country/DXCC code is not entered in the header the DXCC will checked against the DXCC listed in the “Data” section of the award.

4- **Allowed Bands**: The bands valid for the award.

5- **Modes**: The modes eligible for the award.

6- **Valid from/to dates**: Date range of award eligibility

*All the above filters work together. e.g.an award can be designed to only be visible when using CW and contacting a station in the USA, ALASKA and HAWAII on the 20m band between 10 April 2014 to 10 may 2014.*

Awards defined by a user are "custom awards, custom awards will be saved with extension “\_USR” in the award name, to avoid confusion. The developer maintains official awards and it is recommended that the user does not tamper with them.



### *“Data” (References) Characteristics:*

The “Data” or references are the codes for the particular award/activation e.g. “C40 DER” in the “Worked all Britain award or “CO16 La Rotonda” in the Italian Island Award

1- **Code/References:** These codes are the reference keys and they must be unique in the date range. It is possible to have duplicate Codes providing the operative date ranges are different: e.g. from 31<sup>st</sup> January 2013 – 3<sup>rd</sup> February 2013 and then again in the range 21<sup>st</sup> January 2014 – 9<sup>th</sup> February 2014. Only if a QSO is made during these periods will the Codes/reference will be selectable.

A reference is identified by reference code, Valid from/to. Everything else is customizable, so it is possible to have different descriptions for the same reference code, although this is not recommended.

2) **DXCC value.** There is a DXCC field in the award data in addition to the one in the header, which can be utilized instead of the selection in the header.

Using the header DXCC fields are not recommended for regional awards like the Italian Islands Award where the only a couple of DXCC entries apply instead apply the DXCC at data level.

If DXCC is not set in the award header, Log4OM will search the Data/References and show only references related to the country for the call sign entered. If a new park is added in a new DXCC this will automatically show up on the correct DXCC set in the Data/Reference DXCC level.

DXCC set at header level and at reference level work together!

Examples:

#### **Award code for “MY\_AWARD\_1”**

DXCC at header level = NONE

DXCC at reference level:

REFERENCE 1: ITALY

REFERENCE 2: ITALY

REFERENCE 3: ITALY

REFERENCE 4: CANADA

REFERENCE 5: CANADA

In this example if an English call (G) is entered this award will not be available because England is not listed in the header or the Data.

However when an Italian call sign is entered the award will be displayed in the “Award Program” list for selection and References 1, 2 & 3 will be available in the “references” list.

If a Canadian call sign is entered the award will also be available in the “Award Program” list and references 4 & 5 will be available in the “References” list.

#### **Please note:**

If a DXCC is set in the header, zero (0) is not allowed in the Data/Reference

**Award code MY\_AWARD\_2**

DXCC at header level = ITALY

DXCC at reference level:

REFERENCE 1: ITALY

REFERENCE 2: ITALY

REFERENCE 3: ITALY

REFERENCE 4: CANADA

REFERENCE 5: CANADA

REFERENCE 6: NOT SET (zero)

Entering a call sign for Italy will display references 1-3 and reference 6

Entering a call sign for Canada it will show NOTHING, because filter at DXCC level wins. *So this is an example of a bad award definition.*

**Award code MY\_AWARD\_3**

DXCC at award level = ITALY and CANADA

DXCC at reference level:

REFERENCE 1: ITALY

REFERENCE 2: ITALY

REFERENCE 3: ITALY

REFERENCE 4: CANADA

REFERENCE 5: CANADA

REFERENCE 6: NOT SET (zero)

Entering a call sign for Italy will display references 1, 3 and reference 6

Entering a call sign for Canada it will show references 4, 5 and 6

**References can be set with:**

Reference code: (e.g. G-Rom 203)

Reference description: (eg. Church at Romford)

Valid From - Valid To:

DXCC code:

Group description: (Spare field)

Subgroup description: (Spare field)

Score: (decimal) for awards that use it

Score bonus: (decimal) for awards that use it

Notes: (Spare field)

Valid: (true/false)

To avoid the time consuming input of data manually an import facility is provided.

The format of the file for import is tab, semi colon (;), comma (,) or vertical bar (|) delimited and the header row shown below must be the first row.

ActivationItem;ActivationItemDescription;ActivationItemGroup;ActivationItemSubGroup;Activation Note;ActivationScore;Dxcc;ValidFrom;ValidTo

All fields are optional except the first one (activationItem = reference code) and each reference must be unique – No duplicates!

DXCC can be set as number (e.g. 294) or as a prefix (e.g. GW). Log4OM will try to import it as DXCC or trying to match the prefix with our country table. If the import fails an error message will be displayed.

Sample of correctly formatted data for import:

```
ActivationItem;ActivationItemDescription;ActivationItemGroup;ActivationItemSubGroup;ActivationNote;ActivationScore;Dxcc;ValidFrom;ValidTo
B60-Donegal;Donegal;Republic of Ireland;;;245;;
B61-Donegal;Donegal;Republic of Ireland;;;245;;
B62-Donegal;Donegal;Republic of Ireland;;;245;;
B70-Donegal;Donegal;Republic of Ireland;;;245;;
B71-Donegal;Donegal;Republic of Ireland;;;245;;
B72-Donegal;Donegal;Republic of Ireland;;;245;;
B73-Donegal;Donegal;Republic of Ireland;;;245;;
B80-Donegal;Donegal;Republic of Ireland;;;245;;
B81-Donegal;Donegal;Republic of Ireland;;;245;;
B82-Donegal;Donegal;Republic of Ireland;;;245;;
B83-Donegal;Donegal;Republic of Ireland;;;245;;
B84-Donegal;Donegal;Republic of Ireland;;;245;;
B90-Donegal;Donegal;Republic of Ireland;;;245;;
B91-Donegal;Donegal;Republic of Ireland;;;245;;
```

### Defining an award:

1. In the Award Manager window click the green “+” to start a new award.
2. Enter the header details in the “Award Program” tab
3. Go to the “Import references” tab and select the field delimiter used from the “Separator” drop down on the right side below the CSV icon
4. Click the ‘CSV’ button
5. Select the CSV file that you have made and click “Open”
6. The file will be imported and any errors found will be reported in the window below the progress bar.
7. Click the floppy disk save button and close the Award Manager.

*The award is not saved until the floppy disk save icon is clicked.*

Awards are saved in the settings folder:

*C:\users\your user name\AppData\Roaming\LogOM\Awards*

To remove an award, delete it from the folder above but close Log4OM first!

Special awards included with the Log4OM download are:

ARLHS\_WLOL - World list of lights (lighthouses)

BCA - Belgian Castle Award

CISA - Canadian Island Award

DAI - Diploma Abbazie Italiane

DCI - Diploma Castelli Italiani

FFMA - Fred Fish Memorial Award

IIA - Italian Island Award

USA-CA

WAI – Worked all Ireland

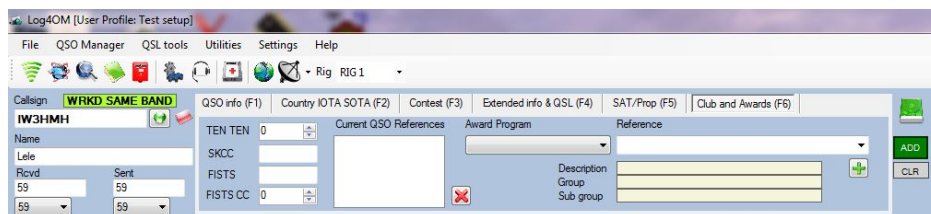
WAB – Worked all Britain

WFF - World Flora and Fauna

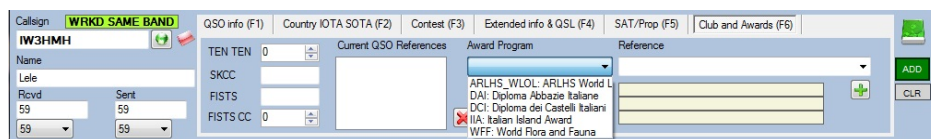
Awards data is saved in the “QSO Award” field and can be displayed in the recent QSO, QSO Archive, QSL Manager and QSO information windows by clicking the “Layout” button at the bottom of each window.

### In action

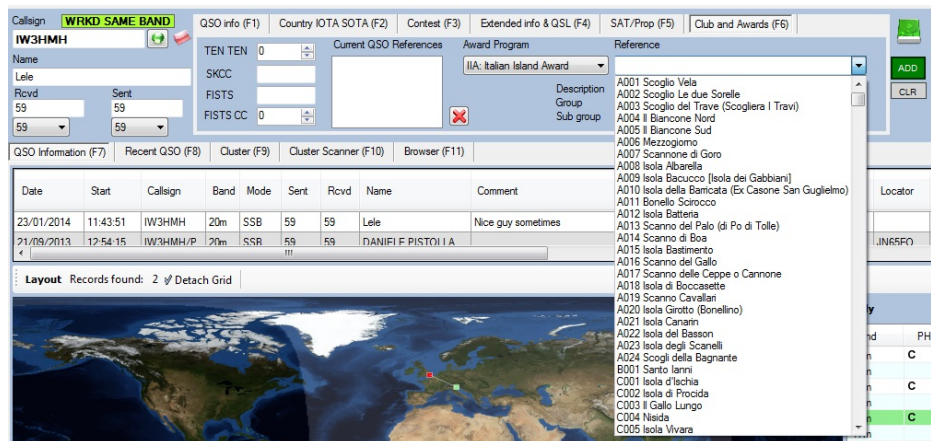
Enter a call sign in the QSO input pane.



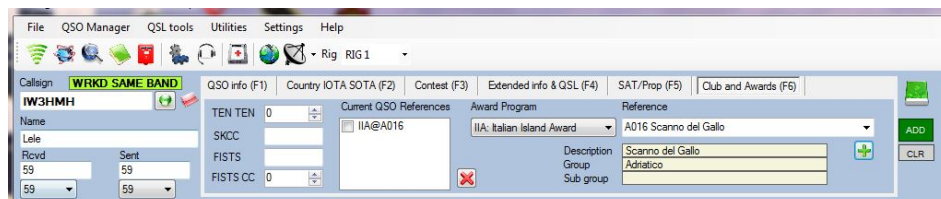
Click the “Award Program” drop down menu in the Club and Awards F6 tab – Only awards applicable to the DXCC, band, mode and valid date range if set in the header will be displayed.



Select the required award from the list



When the correct activation/reference has been selected click on the green plus sign “+” to add the award/reference to the “Current QSO Reference” box.



The reference can be deleted from the box by checking the check box and clicking on the red cross icon “X”

Add the QSO to the logbook by clicking the “Add” button or pressing the enter/return key on the keyboard in the normal way.

The award/reference will be displayed in the “QSO Awards” column if the field has been selected in the ‘Layout’ facility.

QSO Information (F7)		Recent QSO (F8)		Cluster (F9)		Cluster Scanner (F10)		Browser (F11)			
Date	Start	Callsign	Band	Mode	Sent	Rcvd	Name	Comment	QSO Awards	Country	QTH
30/03/2014	09:25:05	IW3HMH	20m	SSB	59	59	Lele		IIA@A016	Italy	Quarto d'Altino (VENICE)
29/03/2014	10:20:38	GI0HW0	40m	SSB	59	59	John		WAI_USR@H82...	Northern Ireland	Islandmagee, County Antrim
29/03/2014	10:19:32	EI4GXB	40m	SSB	59	59	Ger		WAI_USR@R21...	Ireland	Clonlara, Co. Clare
28/03/2014	10:10:46	MD1ML/P	60m	SSB	59	59	Barry Vile			England	CAERNARFON

### If bands and modes are applicable to the award

The award will not be available if the allowable bands and modes selected in the award header are not shown in F1.

The radio must be connected by CAT and the correct band and mode must be selected. Alternatively the band and mode must be entered manually

## SOTA (Summits on the air) Support

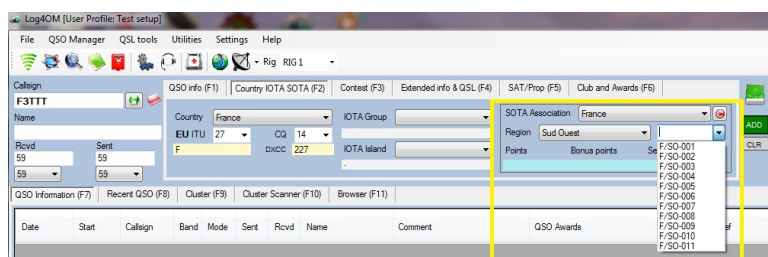
Logging a SOTA contact as a 'Chaser' or 'Activator' is a simple selection process, which requires no manual input by the user.

Log4om includes the complete SOTA list of summits, which can be regularly updated by the user.

### Recording a SOTA reference

When a call sign is entered into the new QSO window Log4om selects the correct SOTA "Association" for the contact call area and provides a list of "Regions" and SOTA "References" for the user to select from.

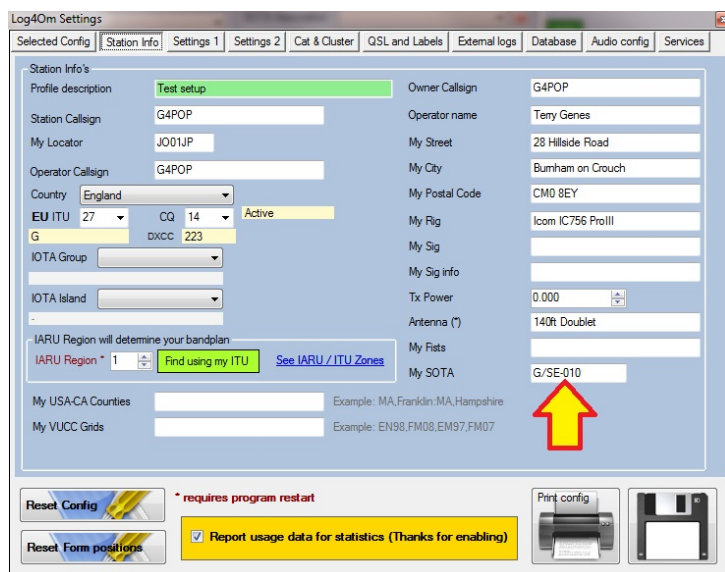
*e.g. if a French call sign is entered the French "Association" is displayed with a list of applicable "Region's" for the user to select from, followed by the list of SOTA "References" for final selection.*



When the QSO is saved the SOTA reference is added to the "SOTA Ref" field.

Date	Start	Callsign	Band	Mode	Sent	Rcvd	Name	Comment	Sota Ref
10/04/2014	07:20:43	F3TTT	60m	SSB	59	59			F/50-007
08/04/2014	22:25:25	SV1SSS	20m	SSB	59	59			SV/10-006
08/04/2014	22:06:05	SV3DCX	20m	SSB	59	59	Panos		SV/MC-016
08/04/2014	22:04:17	K7PT	20m	SSB	59	59	chuck		W1/MV-002

If the user of Log4om is an "Activator" the users "My SOTA Ref" can be added to the Log4om Options 'Station Info' tab and it will then be recorded for every QSO until "My SOTA Ref" is removed from the Options 'Station Info' tab.



When a QSO is saved the “My SOTA Ref” is added to the “My SOTA Ref” field.

Date	Start	Call sign	Band	Mode	Sent	Rcvd	Name	Comment	My Sota Ref	Sota Ref
10/04/2014	07:20:43	F3TTT	60m	SSB	59	59			G/SE-010	F/SO-007
08/04/2014	22:25:25	SV1SSS	20m	SSB	59	59			G/SE-010	SV/VO-006
08/04/2014	22:06:05	SV3DCX	20m	SSB	59	59	Panos		G/SE-010	SV/MC-016
08/04/2014	22:04:17	K7PT	20m	SSB	59	59	chuck		G/SE-010	W1/MV-002

## SOTA Award statistics

Summits worked and confirmed can be displayed by going to Utilities/Statistics & Awards/Awards/SOTA window. This window will display summits worked by Mode, Band, Association (Country), date range, worked & confirmed.

Association	Region	DXCC	Summit	Summit name	80m	60m	40m	30m	20m	17m	15m	12m	10m
Czechia	Křálovhradecký	503	OK/KR-050	Na vršiči		W							
England	Southern England	223	G/SE-013	Deiling Hill		C							
France	Sud Ouest	227	F/SO-007	Troische		W							
Germany (Alpine)	Chiemgauer Alpen	230	DL/CG-017	Großkopf			C						
Germany (Alpine)	Alpiner Alpen	230	DL/AL-001	Biberkopf			W						
Greece	Macedonia	236	SV/MC-016	Pisot					W				
Greece	Ionian Islands	236	SV/IO-006	Iakia					W				
Northern Ireland	Sperrin Mountains	265	GI/SM-013	Donald's Hill			W						
Poland	Sudety Srodkowe	269	SP/SS-010	Stozek Wielki					W				
USA	Menomack Valley	291	W1/MV-002	Fort Mountain					W				
USA - Minnesota	Northeast	291	KOM/NE-012	Moose Mountain								C	
USA - Minnesota	Northeast	291	KOM/NE-009	2046									W

## Uploading a CSV file to SOTA

Log4om provides a SOTA CSV export facility with the CSV file in the correct format for uploading to SOTA for award claims.

### Procedure

1. Go to Utilities/Statistics & Awards and select the “Awards/SOTA” Tab.
2. Select the award “SOTA Mixed”
3. Click the + (Plus) icon to select all countries
4. Click “View” to display all SOTA QSO’s
5. Click the “Export/Current” button at the bottom of the Utilities/Statistics & Awards/Awards/SOTA window to display the “Show QSL” window.
6. Select the QSO’s for export by highlighting them.
7. Click the “SOTA” button at the top of the “Show QSL” window
8. Choose the appropriate export method from the list.
9. Choose a location and name for the export file
10. Click “Save” - Upload the resulting CSV file on the SOTA website.

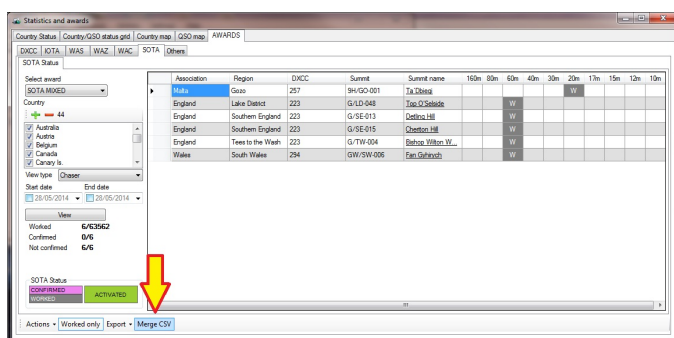
My SOTA Ref	SOTA Ref	Callsign	QSO date	QSO start time	Band	Mode	QSL Sent status
	K0M/NE-012	W1AW/D	31/03/2014	23:01:57	17m	CW	N - No
	GI/SM-013	GIZERT	31/03/2014	17:39:31	40m	SSB	N - No
	SP/SS-010	SQ6BOX	31/03/2014	23:02:14	20m	SSB	N - No
	DL/AL-001	DL1ASF/P	03/04/2014	08:23:13	40m	SSB	N - No
G/SE-010	OK/KR-050	OK1DVM/P	07/04/2014	15:19:03	60m	SSB	N - No
G/SE-010	W1/MV-002	K7PT	08/04/2014	22:04:17	20m	SSB	N - No
G/SE-010	SV/IO-006	SV1SSS	08/04/2014	22:25:25	20m	SSB	N - No
G/SE-010	SV/MC-016	SV3DCX	08/04/2014	22:06:05	20m	SSB	N - No
G/SE-010	F/SO-007	F3TTT	10/04/2014	07:20:43	60m	SSB	N - No

## Downloading a “My Results” CSV file from SOTA

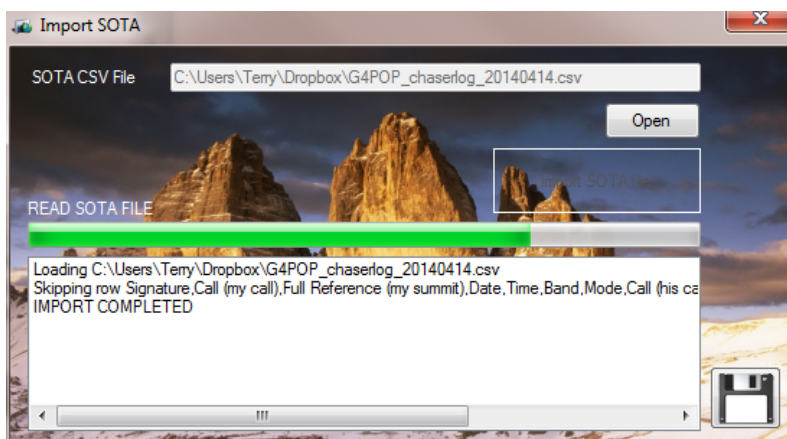
Log4om will update the users log from a “My results’ CSV file downloaded from the SOTA website.

Having downloaded the “My results” file from SOTA follow these steps to update the logbook from the file.

1. Go to “Utilities/Statistics & Awards” in Log4om
2. Open the “Awards/SOTA’ tab



3. Click on “Merge CSV”
4. Select the downloaded file by clicking “Open” in the “Import SOTA” window.
5. Click “Import SOTA file”



6. Close the window and the logbook will have been updated with the SOTA entries.

**Please note the “merge” facility updates the SOTA information of QSO’s that already exist in the logbook – It does not import new QSO’s**



## Keeping the SOTA references current

Download the summitlist.csv from the SOTA web site at:

<http://www.sotadata.org.uk/summits.aspx>

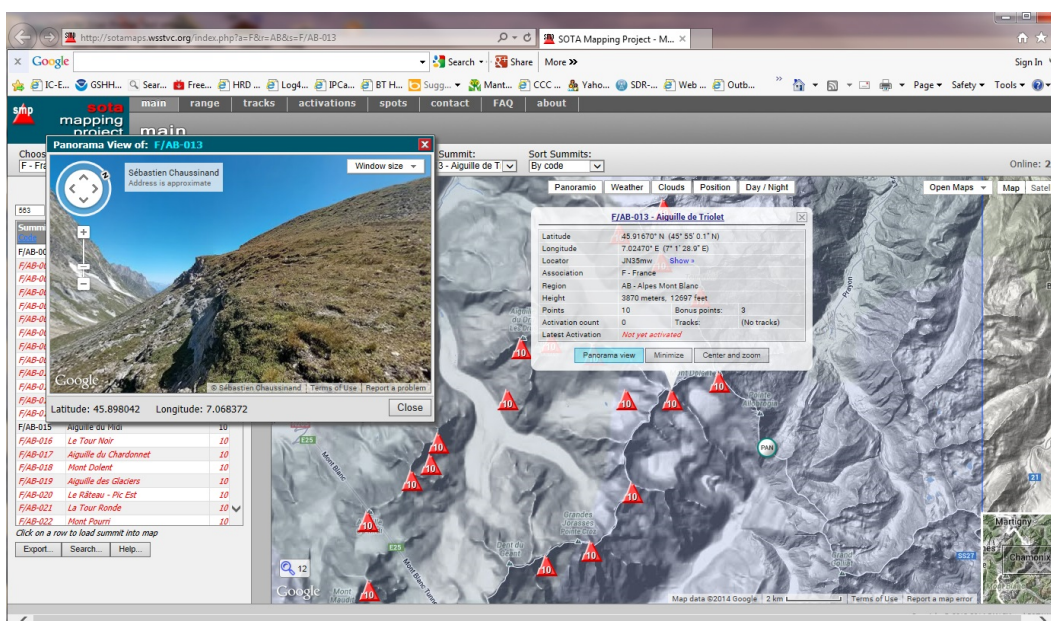
Save the file to the LogOM folder here: C:\users\YOUR USER NAME\AppData\Roaming\LogOM

Allow the old file to be overwritten by the new one.

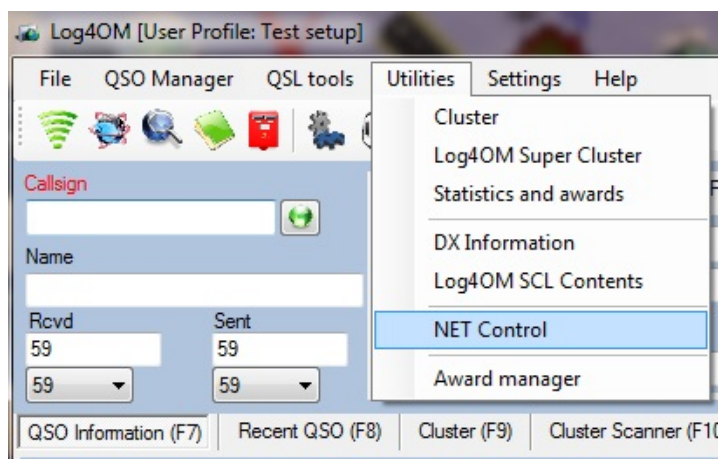
## Viewing detailed summit details and maps

SOTA Associations, Regions and summits can be viewed in interactive maps online in the "SOTA Mapping Project" <http://sotamaps.wsstvc.org> which, since its' introduction in 2012, has become the de facto standard online mapping application for SOTA. The maps provide a wealth of information, from summit positions, activation status and panoramic views, real-time spots of SOTA activations, user-defined tracks and routes to users' favorite summits, and much more. ' The SOTA Mapping Project is provided by Rob Banfield DM1CM please support him in his endeavours.

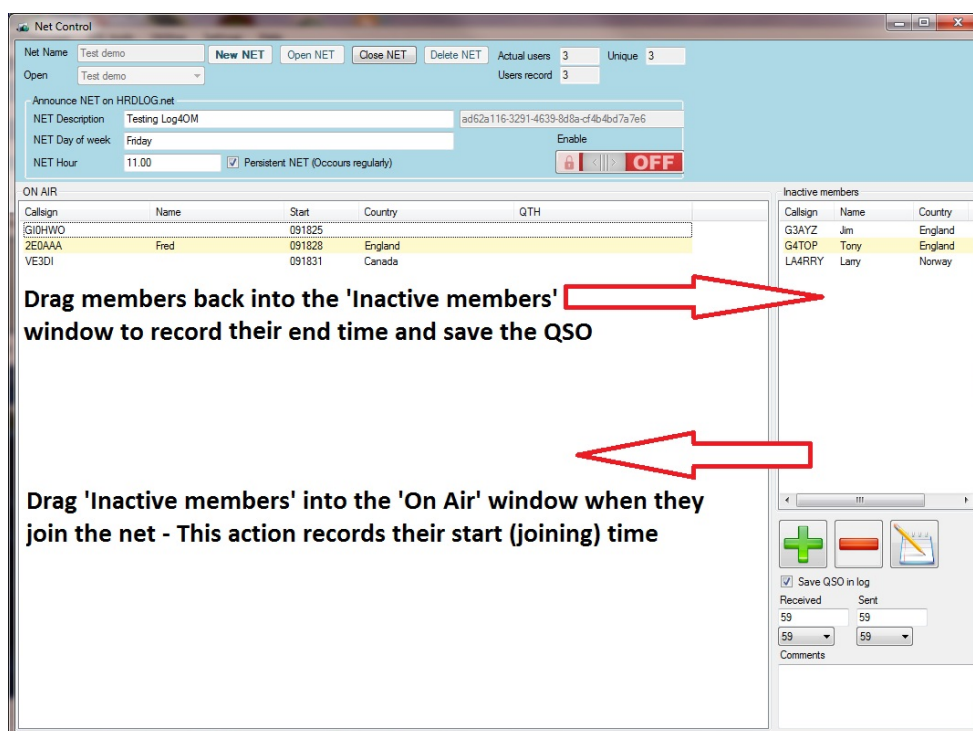
Clicking an underlined SOTA reference either in the Log4om QSO or awards windows will automatically open a web browser and navigate to the specific summit in the SOTA Mapping Project.



## Net Control



Net control is useful to both net controllers and net members for ease of recording activity as well as member details.



The Net Control window simulates an air traffic controller's movement board and provides a drag and drop facility for members joining or leaving the net.

The time when the member joins the net is recorded as the QSO start time for that particular member. This time commences when the call sign of an inactive member is dragged from the 'Inactive members' pane into the 'On Air' members' pane.

Likewise, when a member leaves the net his call sign is dragged out of the 'On Air' pane into the 'Inactive' pane. This action will record the end time for the QSO with that member. A lookup of either QRZ or HamQTH is carried out as the QSO is added to the log and any missing details are updated.

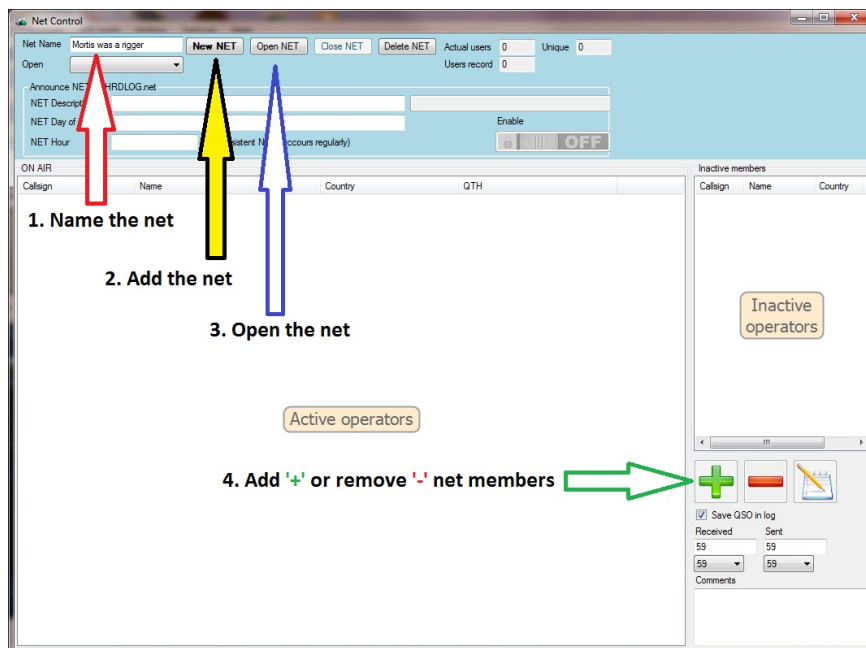
### Adding nets and members

Nets can be added or deleted by using the buttons indicated in the graphic below.

To view an existing net, select from the names in the drop down menu in the 'Open' field near the top of the screen.

To create a new net:

1. Enter its name in the 'Net Name' field in the top left corner of the screen. (Red arrow)
2. Click "New net" to add the new net (Yellow arrow)
3. Click "Open net" to open the net (blue arrow).



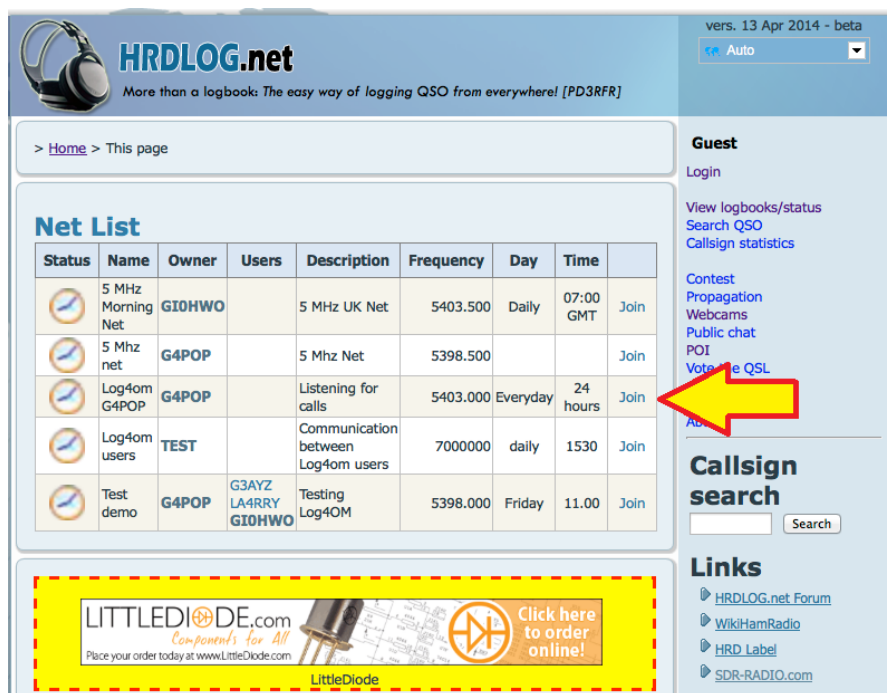
4. Call signs of new members may be added or removed at any time by clicking the green 'Add' button or red 'Minus' button.

### Announcing nets on line with HRDLog.net

To ensure maximum visibility of a net it is possible to publish details of a net on the Internet by using the HRDLog.net “Net’ display facility. Members of HRDLog.net can view all current nets in the HRDLog.net web page and join a net by clicking the “join’ button.

Please note:

The Log4om users name and upload code must be entered in the Log4om Options/External logs tab and the “Automatic HRDLog ON AIR” box must be checked to make this facility available.



HRDLOG.net  
More than a logbook: The easy way of logging QSO from everywhere! [PD3RFR]

vers. 13 Apr 2014 - beta  
Auto

> [Home](#) > This page

#### Net List

Status	Name	Owner	Users	Description	Frequency	Day	Time	
	5 MHz Morning Net	G10HWO		5 MHz UK Net	5403.500	Daily	07:00 GMT	Join
	5 Mhz net	G4POP		5 Mhz Net	5398.500			Join
	Log4om G4POP	G4POP		Listening for calls	5403.000	Everyday	24 hours	Join
	Log4om users	TEST		Communication between Log4om users	7000000	daily	1530	Join
	Test demo	G4POP G3AYZ LA4RRY G10HWO		Testing Log4OM	5398.000	Friday	11.00	Join

Guest  
Login  
View logbooks/status  
Search QSO  
Callsign statistics  
Contest  
Propagation  
Webcams  
Public chat  
POI  
Vote for QSL

#### Callsign search

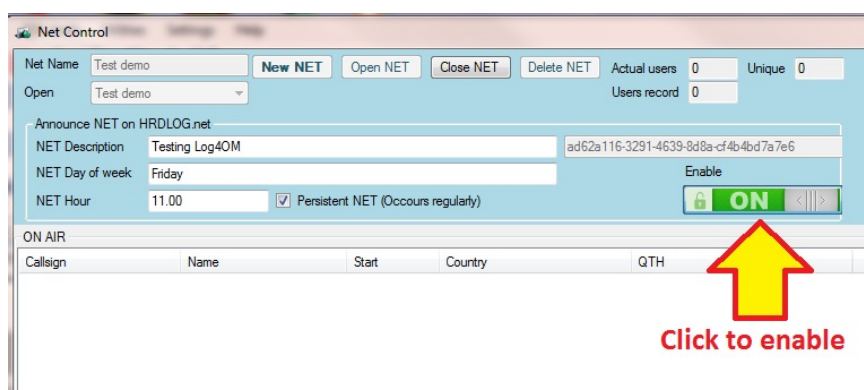
 

#### Links

- [HRDLOG.net Forum](#)
- [WikiHamRadio](#)
- [HRD Label](#)
- [SDR-RADIO.com](#)

**LITTLEDIODE.com**  
Components for All  
Place your order today at [www.LittleDiode.com](http://www.LittleDiode.com)  
Click here to order online!  
LittleDiode

To announce a net on line first open the net, fill in the optional net information fields and click the “Enable” button.



Net Control

Net Name: Test demo     Actual users: 0 Unique: 0  
Open: Test demo Users record: 0

Announce NET on HRDLOG.net

NET Description: Testing Log4OM ad62a116-3291-4639-8d8a-cf4b4bd7a7e6  
NET Day of week: Friday Enable  
NET Hour: 11.00  Persistent NET (Occurs regularly)

ON AIR

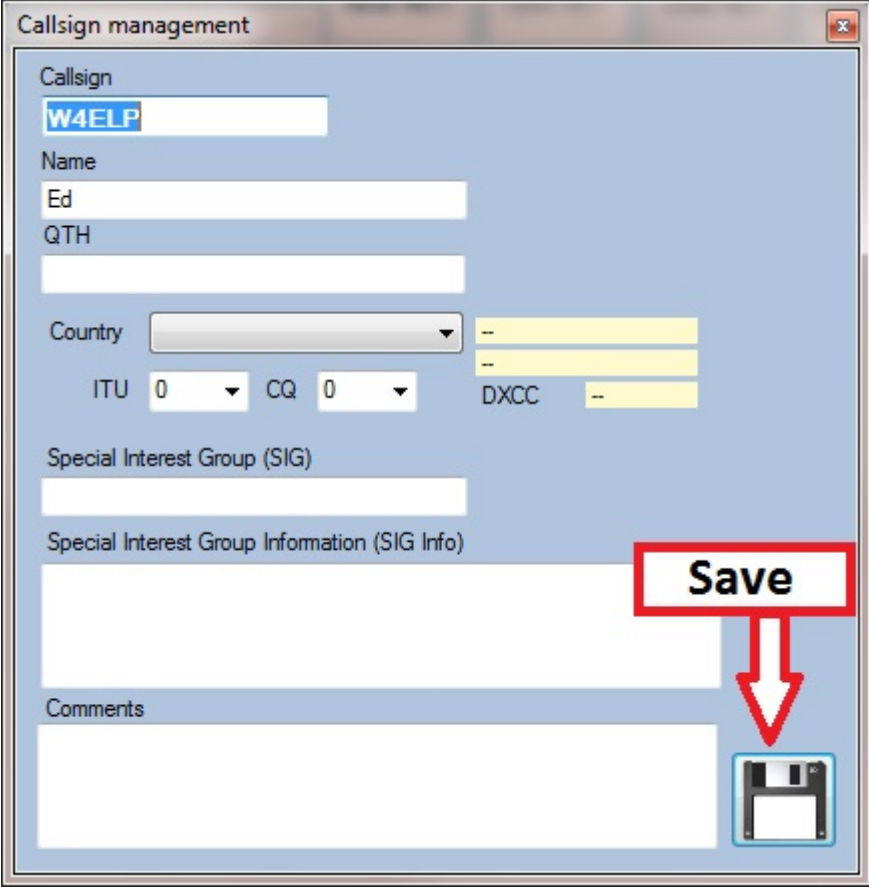
Callsign	Name	Start	Country	QTH

Click to enable

### Call sign Management

Double click on any call sign in the 'On Air' screen to open the 'Call sign Management' screen. Then insert any details required and click on the Save Icon (indicated by the red arrow in the screen below).

Details can also be added to the call signs of 'Inactive members' (listed on right of screen) To do this, highlight a call sign then click on the icon for the notepad (near the bottom of the screen) Insert new details and click on the Save Icon (indicated by the red arrow in the screen below).



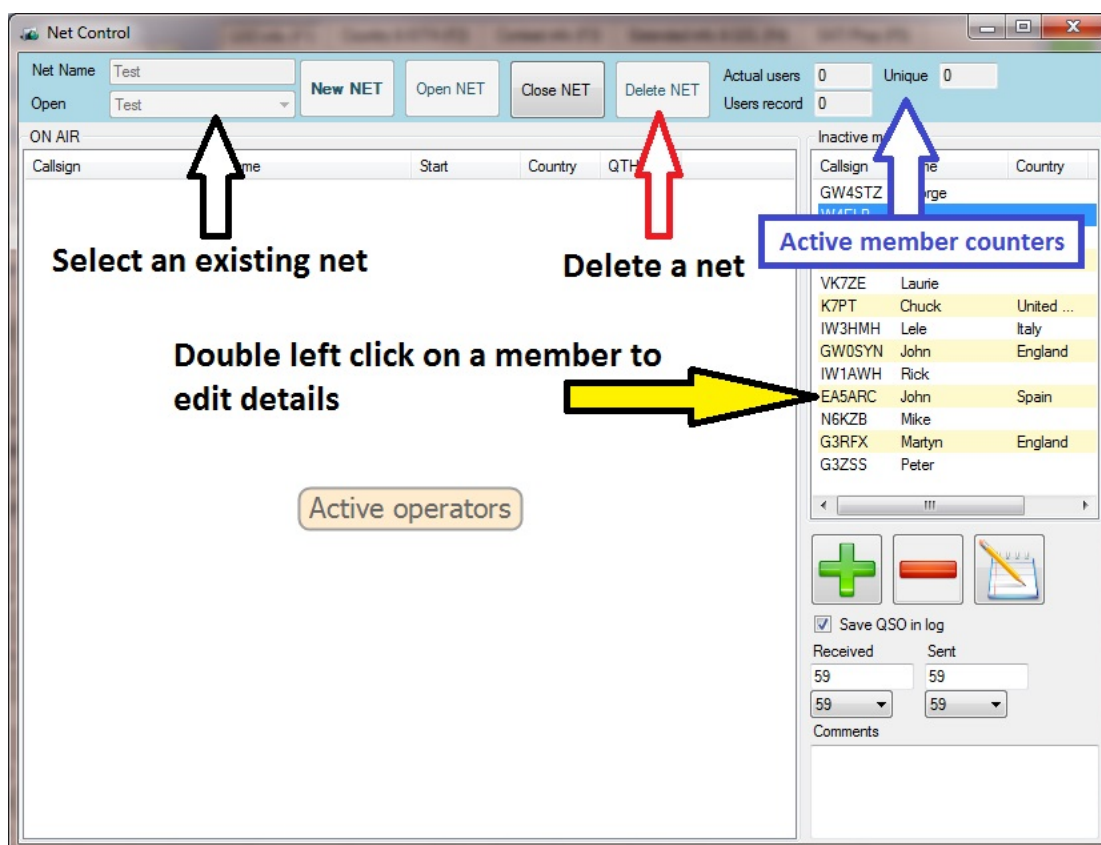
The image shows a screenshot of a software window titled "Callsign management". The window contains a form with the following fields and controls:

- Callsign:** A text box containing "W4ELP".
- Name:** A text box containing "Ed".
- QTH:** An empty text box.
- Country:** A dropdown menu with "--" selected.
- ITU:** A dropdown menu with "0" selected.
- CQ:** A dropdown menu with "0" selected.
- DXCC:** A dropdown menu with "--" selected.
- Special Interest Group (SIG):** An empty text box.
- Special Interest Group Information (SIG Info):** An empty text box.
- Comments:** An empty text box.

A red box with the word "Save" is positioned over the right side of the form. A red arrow points from this box down to a floppy disk icon, which is the save button.

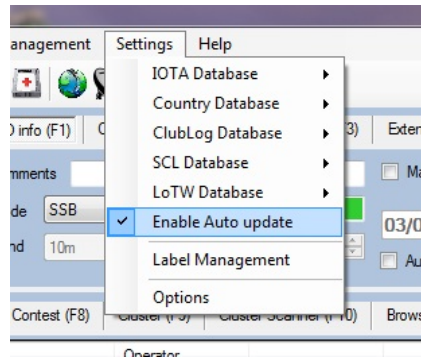
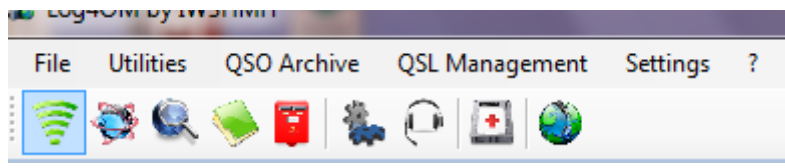
Once the details of a member have been added click the save button as shown in the graphic above.

The functions of the other Net Control buttons are shown below.



To close the net, click on the 'Close Net' button. All details will be saved to a file that will be retrieved when the net is re-opened.

## Menu Bar and Icon Bar



### Settings

Due to deficiencies in online data sources, LOG4OM recommends the use of a combination of the included IOTA database, Log4OM Country database, the Club Log Exception list and Log4OM SCL (Special Call List). This will ensure greater accuracy of data.

**Only use QRZ or HAMqth data to supplement data from the LOG4OM internal look up sources!**

**THE USE OF QRZ.COM OR HAMQTH.COM DATA ALONE IS NOT RECOMMENDED.**

### IOTA database

It is possible to update the database at any time in any of 3 different ways.

1. By automatically downloading an XML file from the RSGB website. Log4OM performs this operation automatically and updates the database in real time. This action is user selectable because the IOTA database is very rarely changed.
2. By manually downloading a local XML file from the RSGB. This can be used in the absence of an available Internet connection. The file could also be downloaded from another PC and then loaded into Log4OM with this option. At the time of writing, the file can be found at <http://www.rsgbiota.org/xml/fulllist.xml> The link is configurable, and is contained in the file (xml): LogOMUI.exe.config.
3. By modifying the configuration files in the folder IotaDB.xml outside of the program.

## Country Database

By courtesy of K7PT, Log4OM is able to update automatically using the information on the K7PT website.

The country database is constantly updated and Log4OM makes it easy for users to manage these updates. The download site is at <http://www.k7pt.com/LogbookCountryDataEx.xml>

If no internet connection is available, the user can upload the file directly from disk and edit the file directly in the configuration folder.

## Clublog Database

LOG4OM can download the complete Clublog exceptions file. Using it will provide greater accuracy than using other data sources such as QRZ.com or HamQTH.

The user should regularly download this file to ensure continued integrity of the logbook. It is suggested that this is done at least once a week.

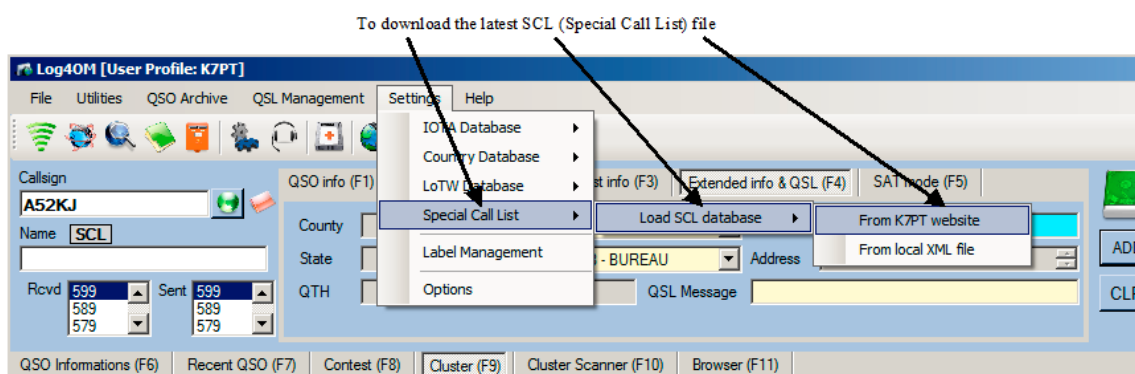
## Special Call List (SCL)

Without the SCL, calls such as the TO, VP8, TX, VK9 and other prefixes can be difficult to map correctly to the appropriate entity. The SCL database overcomes this issue and thereby, provides greater accuracy when logging contacts.

The database is updated daily by K7PT in concert with IW3HMH and G4POP, so the user is advised to update the SCL DB every day to insure accurate logging.

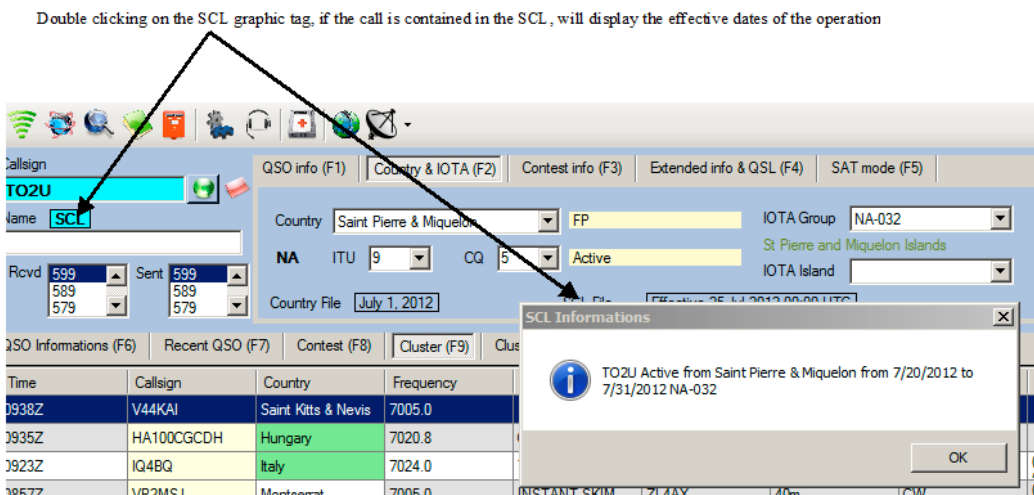
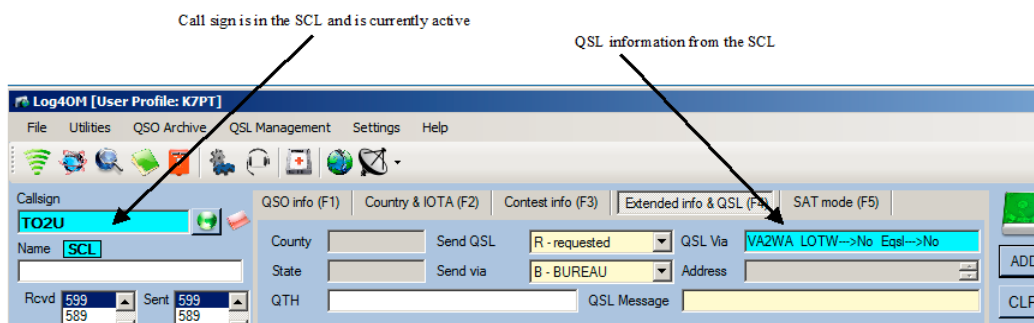
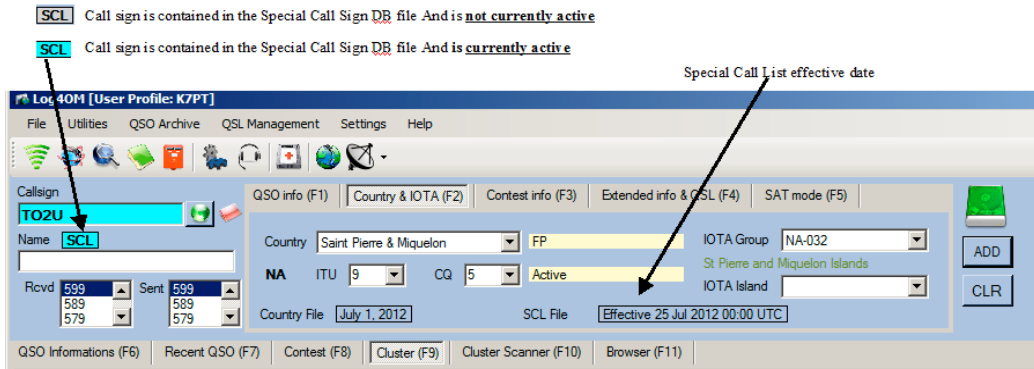
The data for calls contained in the SCL file describes the Country/Entity of the operation, the IOTA, QSL information, LOTW/EQSL usage, the start and end date of the operation.

The file can be downloaded and installed automatically from Settings>Special Call List>Load SCL database> From K7PT Web Site.



When a call is entered into the main logging window, the program checks if it is in the SCL. If it is, the appropriate data is gathered from the file and inserted into the appropriate fields. If the call is not in the SCL, data is gathered from either QRZ.com or HamQTH, depending upon the user's selection in the user profile.





### The SCL information window lists the following data:

- Call sign
- Location
- Active start and end dates
- QSL via information – Managers call sign
- QSL by LOTW or eQSL – Yes or No
- LOTW field- 'Yes-6M' indicates that LOTW log will be uploaded by the operation 6 months after conclusion
- OQRS indication if the operation uses the ClubLog OQRS system

### LOTW database

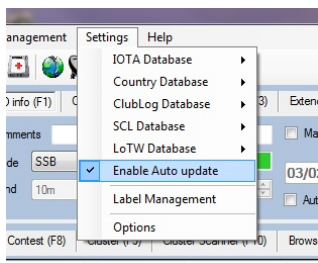
Log4OM is able to update the information for LOTW users from a text file or, automatically, from the LOTW HB9ZA web site, with the permission of the author.

### Awards Database

This function updates the special awards specification from the Log4om website any new awards that have been added since the last download will be displayed in the F3 Club & Awards tab.

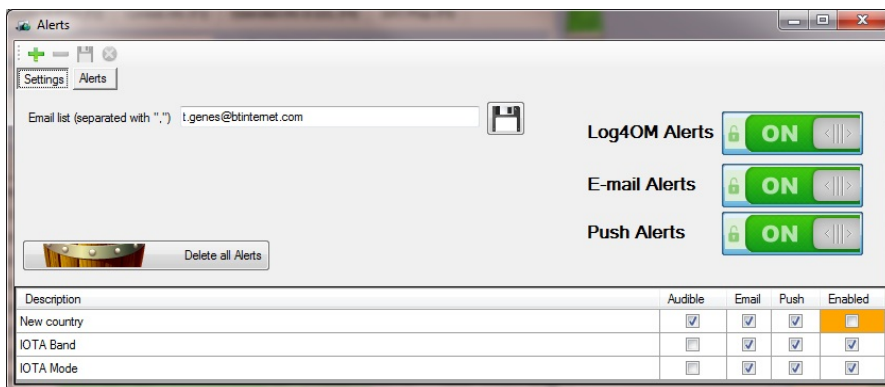
### Auto Update

Select 'Auto Update' to regularly update the data files. The frequency of update can be set in the 'Settings 2' tab of the 'Options' menu.



### Alerts

See the section on setting alerts

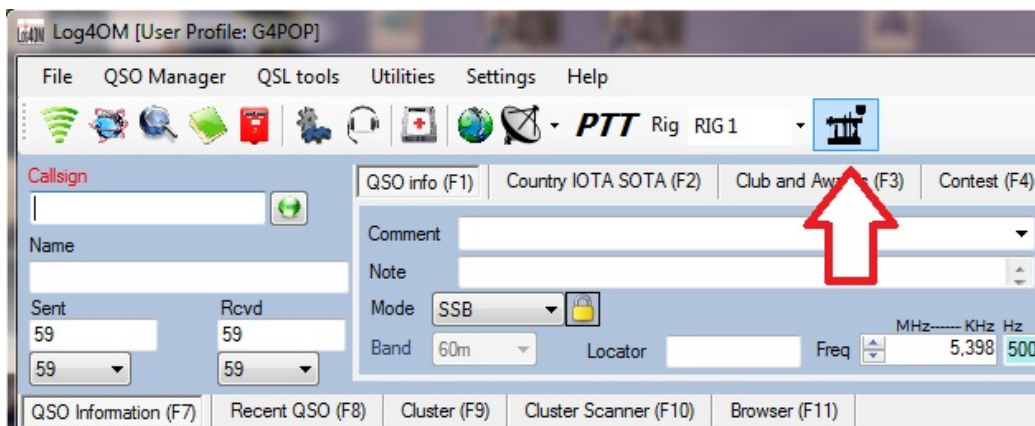


## Winkeyer

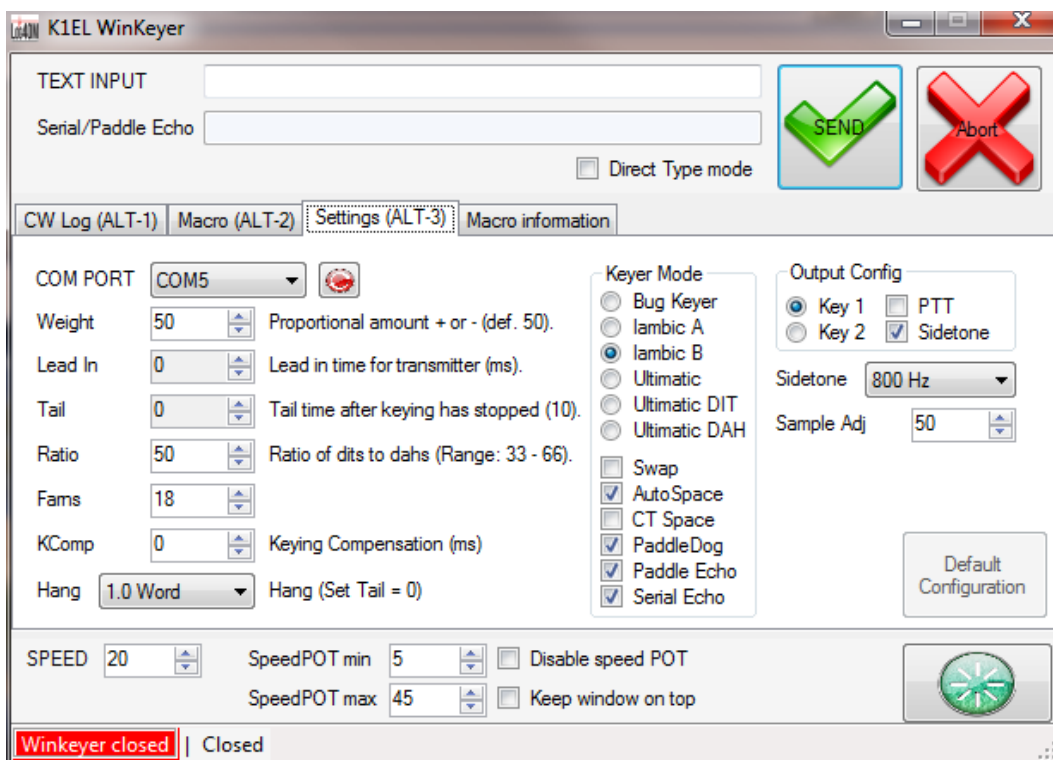
The integrated K1EL Winkeyer support in Log4om provides full control of Winkeyer hardware for all Winkeyer versions.

Additionally the facility provides CW transmit using macros, direct keyboard input or paddle key and includes direct QSO logging from the Winkeyer window.

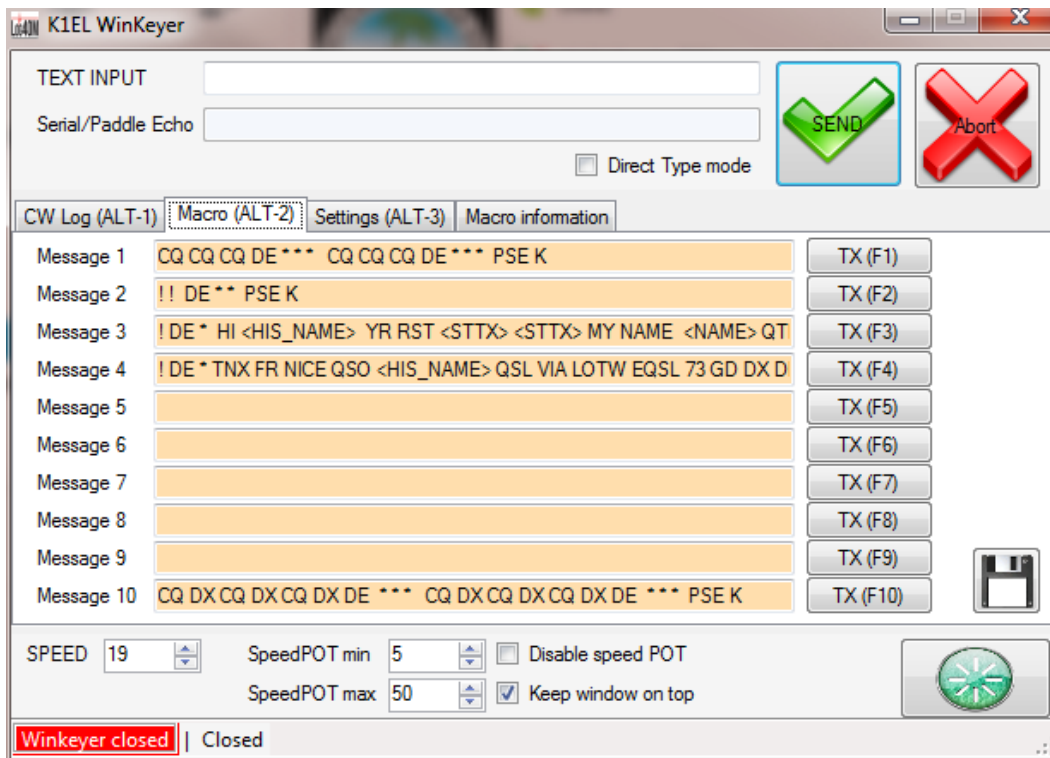
To open the Winkeyer dialog click the Morse key icon on the toolbar.



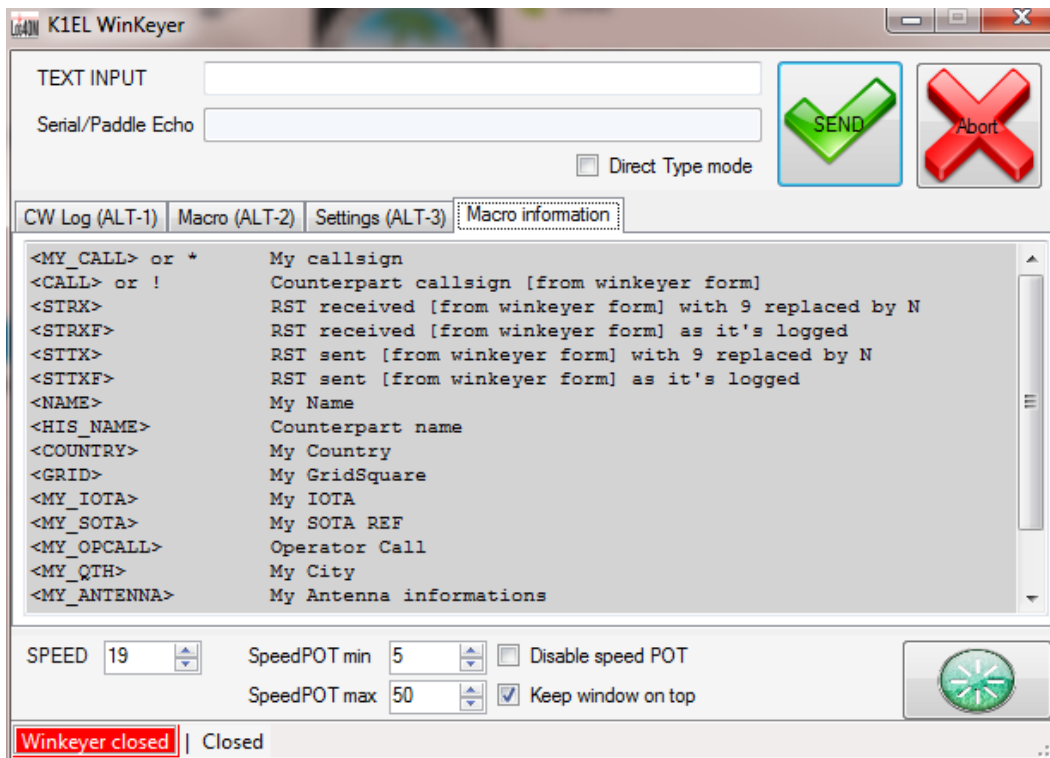
When the dialog window opens click the “Settings (ALT-3)” tab to select the required Winkeyer set up and choose the COM port to which the Winkeyer is connected. For Winkeyer settings information please consult the Winkeyer K1EL web site and user guide.



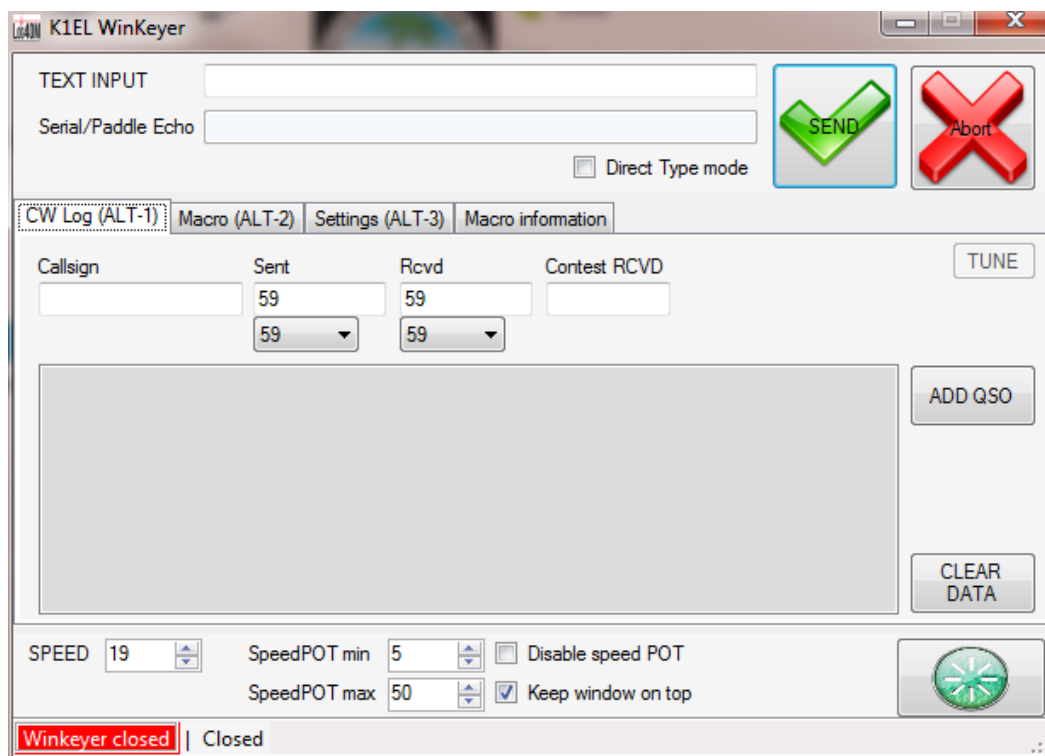
Macros can be designed in the Macro (ALT-2) tab



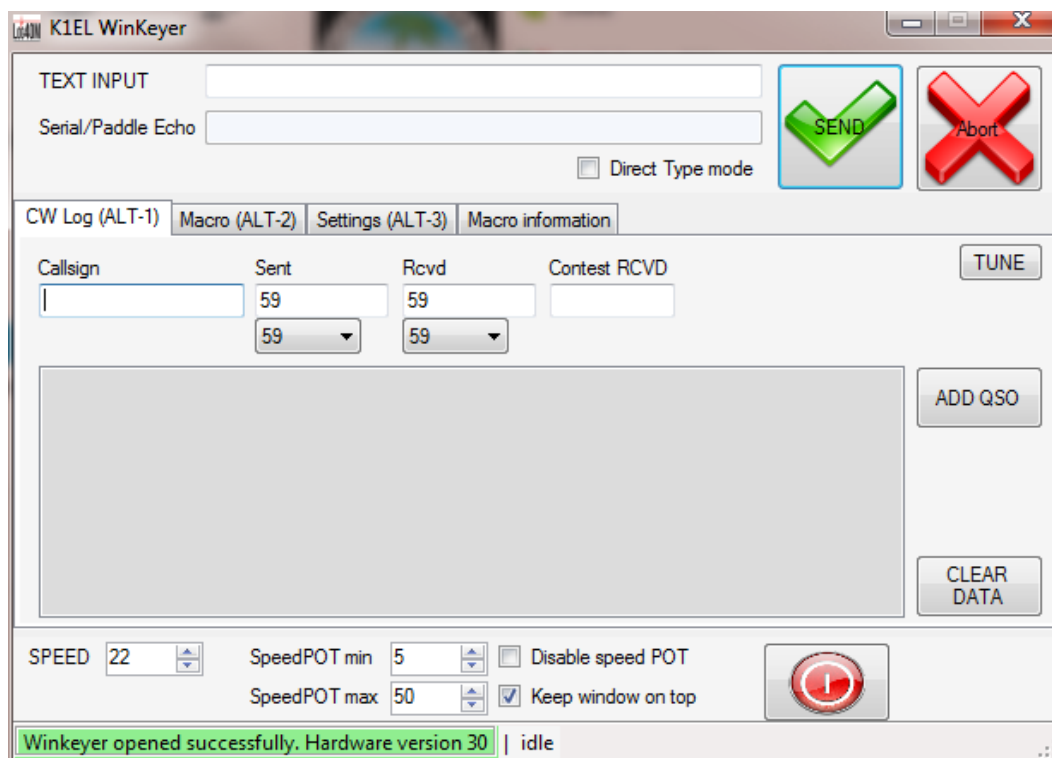
Use of the Data Calls listed on the “Macro Information” tab in macros can simplify macro creation and use



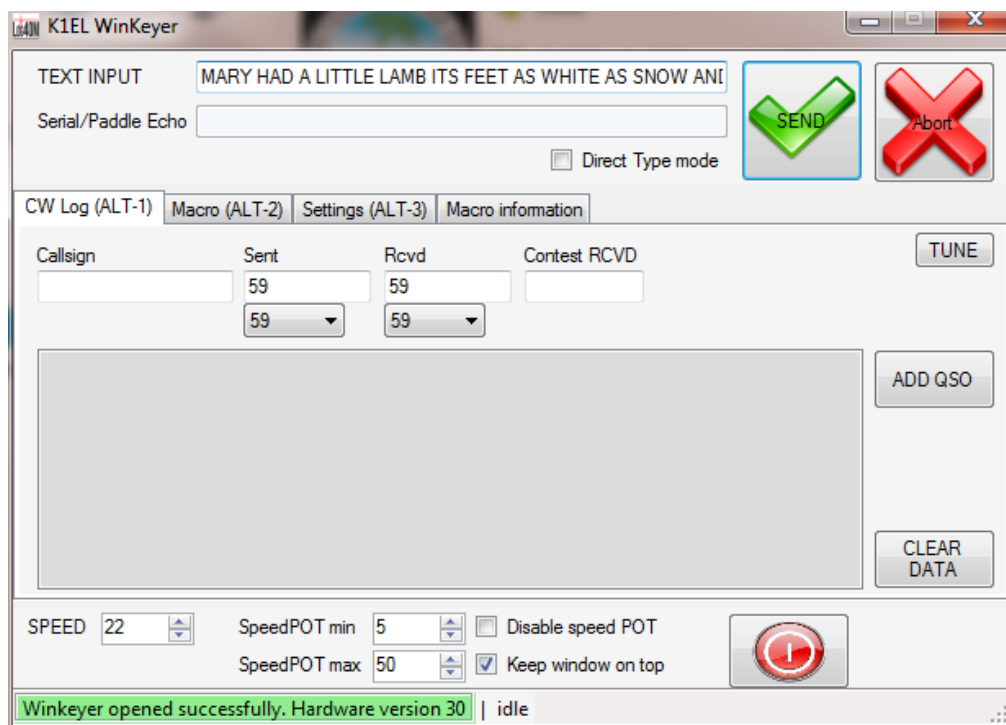
When the set up is complete all operating is done from the “CW Log (ALT-1)” tab



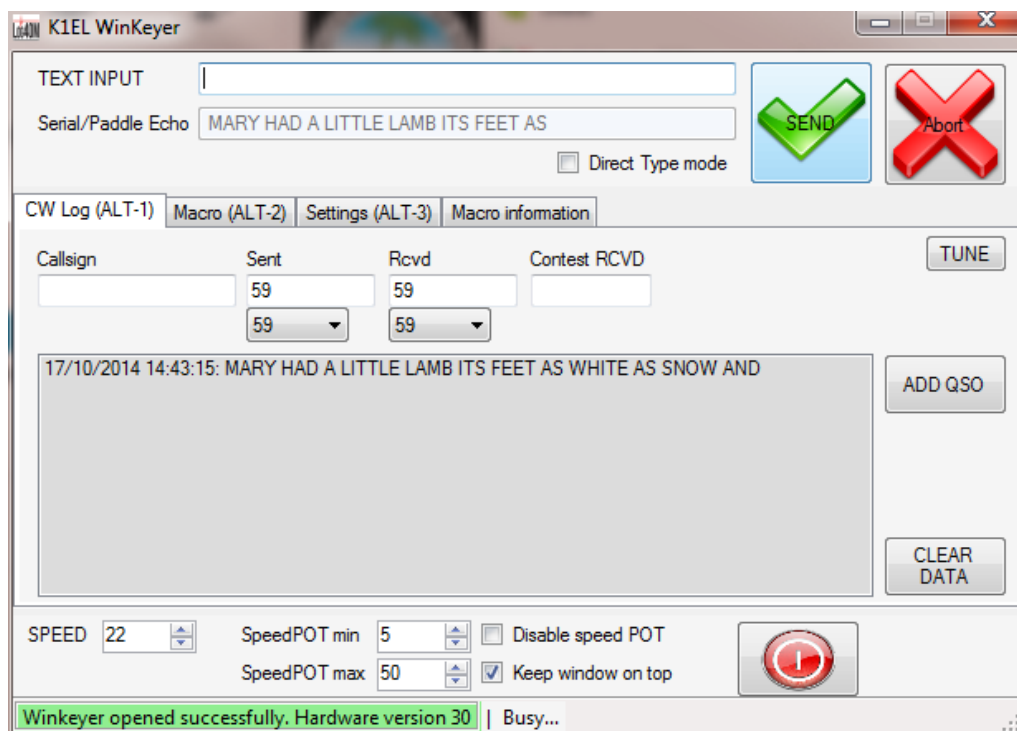
To connect to the Winkeyer, click on the Green button at the bottom right hand corner of the window. The message in the lower left will change to green and indicate that the Winkeyer is open and show the hardware version as below.



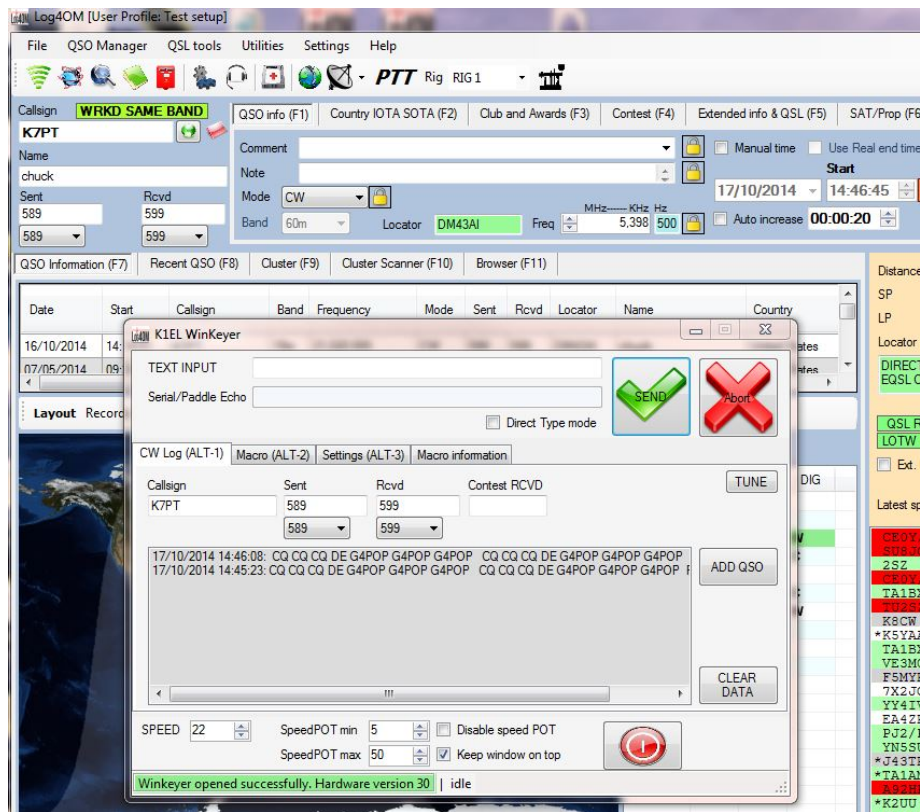
The message to be sent can be typed into the “TEXT INPUT” field at the top and either sent immediately if the “Direct type mode” box is checked or by clicking the “Send” button and sending can be aborted by clicking the “Abort” button



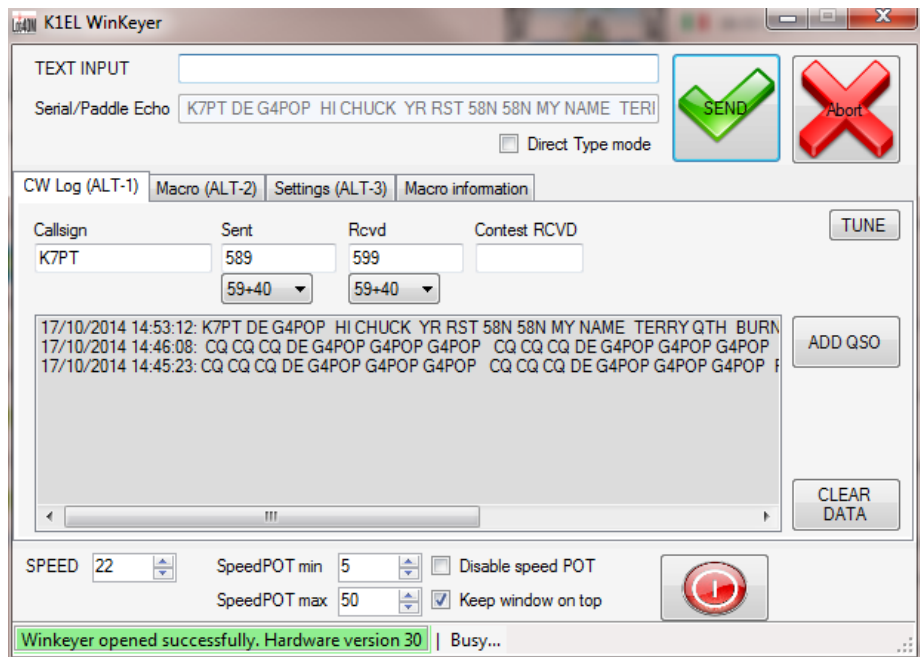
Text sent is displayed in the lower message box and if “serial Echo” is enabled it is displayed as it is sent in the “Serial/Paddle Echo” field.



If a call sign is entered into the “callsign” field and the cursor is moved to the next field either by mouse click or pressing the tab key the call is sent to the log for lookup. This action provides the other station details including the name for use in a response macro.



When responding to the calling station the data is then complete



When the QSO is completed click the “ADD QSO” button to add the QSO to the logbook. Contest exchanges can be made if the “Enable Contest Mode’ box is checked in the ‘Contest (F4)’ tab of the main Log4om window.

## **Miscellaneous**

### **Synchronize logbooks using Dropbox**

It is possible to synchronize data on multiple computers by using Dropbox which is free from <https://www.dropbox.com>

#### **Warning**

***Unexpected results & possible data loss will be experienced if the log is updated simultaneously from more than one of the computers – Only use one instance of Log4OM at any time.***

#### **Typical situation:**

A user has the following setup:

1. A main computer in the shack.
2. A laptop in the house used to update QSL sent and received status.
3. A Netbook computer used when operating portable or at an alternative location.

All computers must have Log4OM and Dropbox installed and use the same file located in a Dropbox folder, e.g. C:\.....\Dropbox\Log4OM Logs\Mylog.sqlite

#### **In use:**

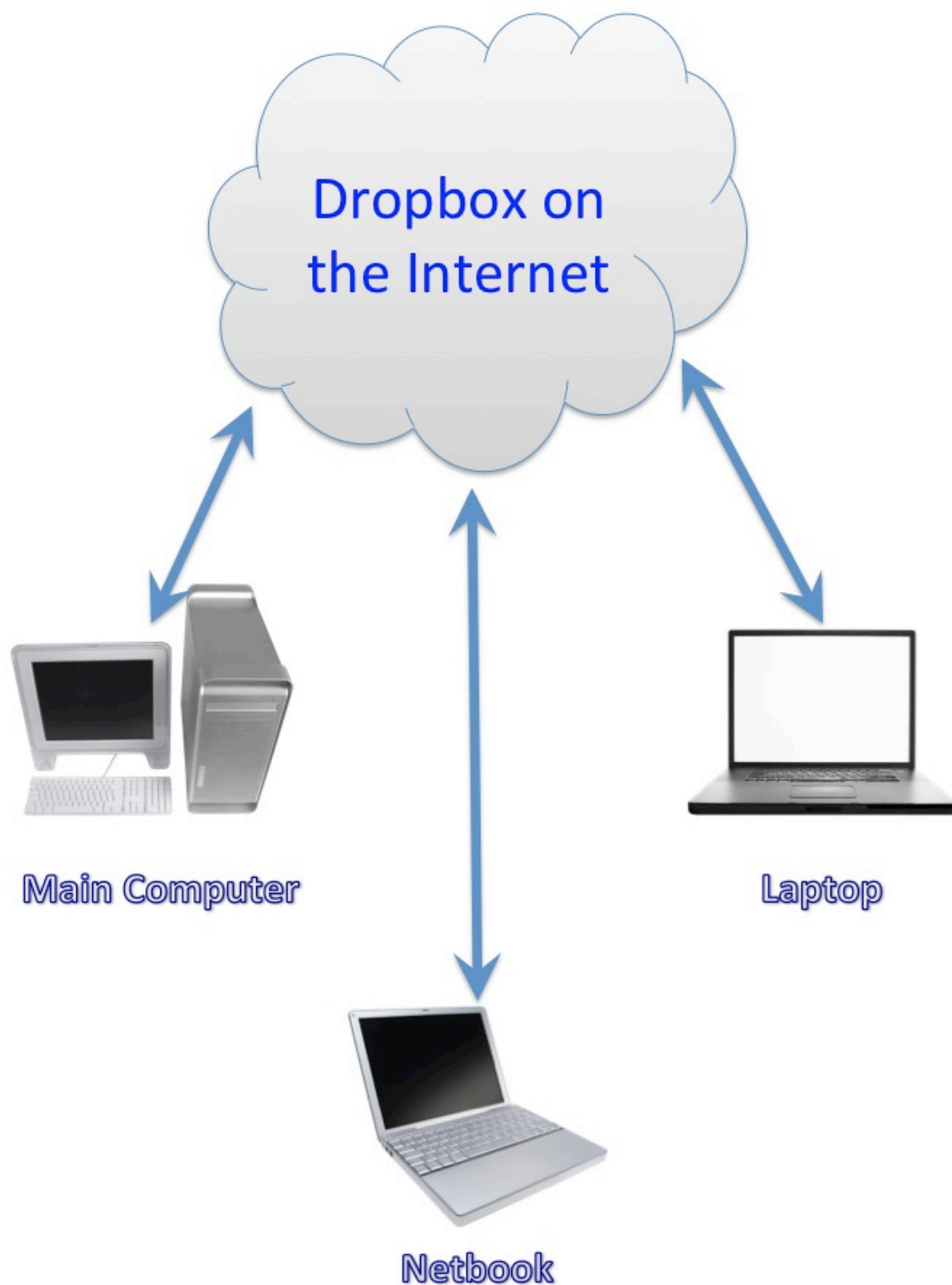
- ❖ The user operates from his shack and the Dropbox log is updated and gets synchronized to the other two computers as QSO's are added.
- ❖ Later the user operates from another QTH or portable using a Netbook computer and the Dropbox log is updated and gets synchronized to the other two computers as QSO's are added.
- ❖ The following day using the laptop the user updates the Log4OM status for 100 QSL cards that came from the bureau and also 24 cards that were sent out - Dropbox synchronizes to the other two computers.

#### **Result:**

- All computers have the latest QSO's and also the latest QSL status.
- If the automatic backup facility included in Log4OM is used to backup to Dropbox also the user then enjoys full security by having a copy of his log and a backup on all computers that he has connected to Dropbox.

***If the user needs to use all three computers simultaneously, as in a contest situation with three different stations logging to a central logbook, then it is necessary to use MySQL and a centralized logbook as detailed later in this guide.***





**All computers have Dropbox installed**

## Transferring a database and configuration to another PC

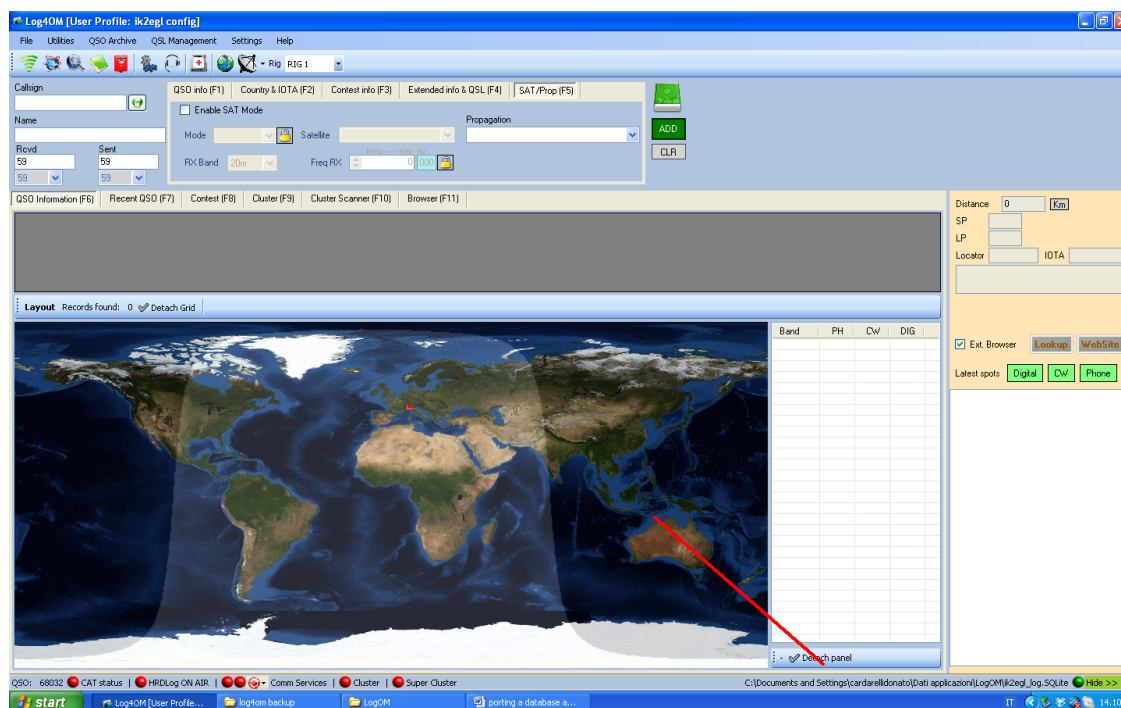
By IK2EGL

To copy the Log4OM configuration onto another PC be aware that:

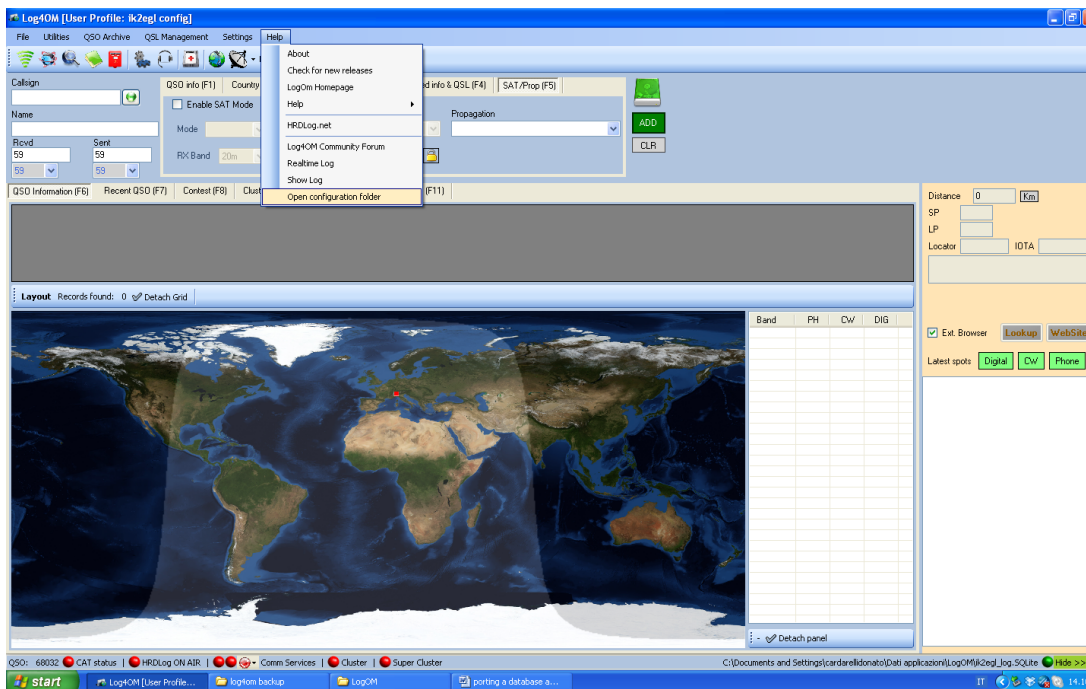
- All logbook data is stored in an SQLite database file e.g. *Mylogbook.SQLite*.
- The Log4OM configuration is stored in the config.xml file and communicatorconfig.xml file and all user-modified files have names that end with “\_user.”
- The installation of the software on the destination computer may have caused some parts of the software to be installed to a different location to that of the original PC depending on the windows version.

### Gathering data from the original installation

- Locate the logbook database file mentioned in ‘A’ above which can be identified in the LOG4OM main window at the bottom right corner (See below). Take note of the location.
- Close Log4OM
- Copy the file to the portable media being used to transport the information (USB drive, floppy, SD card etc).



- Locate the Log4OM configuration files identified in “B” above which can be found in the Log4OM configuration folder – Go to the “help” menu and select “Open configuration folder” as shown below.



- Note the location of the folder
- Close Log4OM
- Copy the configuration files on the portable media.

*Locations that may be different on the destination PC as mentioned in "C" above are:*

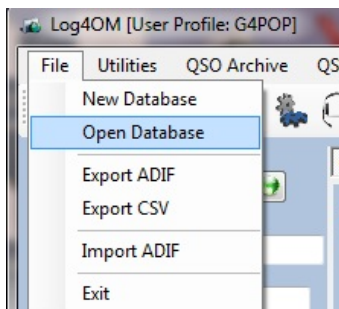
- COM PORT used for the CAT system
- The path to the logbook file (eg. c:\mylog\my\_log\_file.sqlite)
- The path to LOTW TQSL.EXE (c:\programs\ARRL\...)
- The path to the backup folder
- The port used by the rotator software
- The IP address of any remote Hamlib instance

All above information can be found in the Log4OM 'Options/Settings 2 and 'Options/External logs tabs

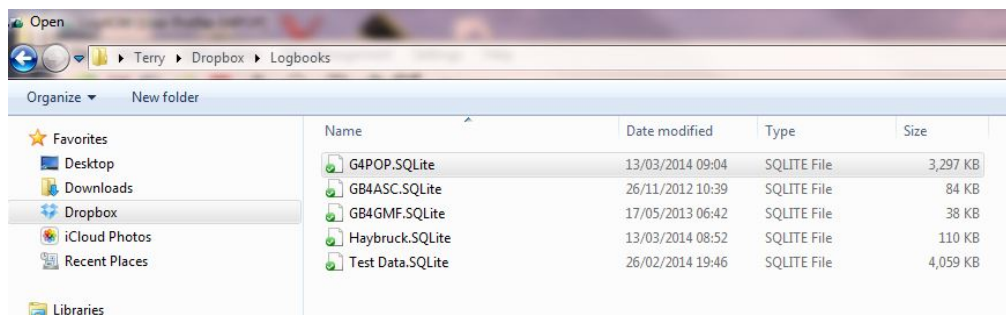
The audio files for the voice keyer function are also stored in the Log4OM settings and these must be moved manually from the old to the new installation.

### Copying data to new installation

1. Install Log4OM to the new target PC
2. Open Log4OM and locate the configuration folder by viewing the Log4OM 'Help/Open configuration folder'
3. Close log4om
4. Copy the logbook database SQLite file from the portable media into a folder of choice. (Perhaps My Documents)
5. Copy the configuration files from the portable media into the new Log4OM configuration folder
6. Open Log4OM
7. In Log4OM go to the 'File' menu and select 'Open Database'



8. Navigate to the location where the logbook SQLite file was copied and select it.



9. Click 'Open' (The contents of the transported logbook will now be displayed in the 'Recent QSO' tab of the main screen.)
10. Go to the Log4OM 'Options' and manually update the information contained in 'Setting 2' and 'External logs' tabs.
11. Save the configuration.
12. Restart Log4OM and the operation is complete.

## Recording, sorting and listing portable operations.

When working /P it is necessary to identify such operations by editing the Log4om "Options/Station Information" to enable these portable or expeditions to places other than the normal home (Main) location.

In the station info tab change the following as required

'Station' & 'Operator call sign' e.g. G4POP would be changed to G4POP/P or G4POP/MM etc

'My Locator' Change to the location of the Portable, Marine Mobile or other location

'My SOTA' if activating a SOTA

As below

The screenshot shows the 'Log4Om Settings' window with the 'Station Info' tab selected. The 'Station Info's' section contains the following fields and values:

Profile description	Test setup	Owner Callsign	G4POP
Station Callsign	G4POP/P	Operator name	Terry
My Locator	IO84RI	My Street	28 Hillside Road
Operator Callsign	G4POP/P	My City	Bumham on Crouch
Country	England	My Postal Code	CM0 8EY
EU ITU	27	CQ	14
G		DXCC	223
IOTA Group		My State	
IOTA Island		My County	England
IARU Region will determine your bandplan		My Rig	Icom IC756 ProIII
IARU Region *	1	My Sig	
Find using my ITU		My Sig info	
See IARU / ITU Zones		Tx Power	0.000
My USA-CA Counties		Antenna (*)	140ft Doublet
My VUCC Grids		My Fists	
		My SOTA	G/NP-013

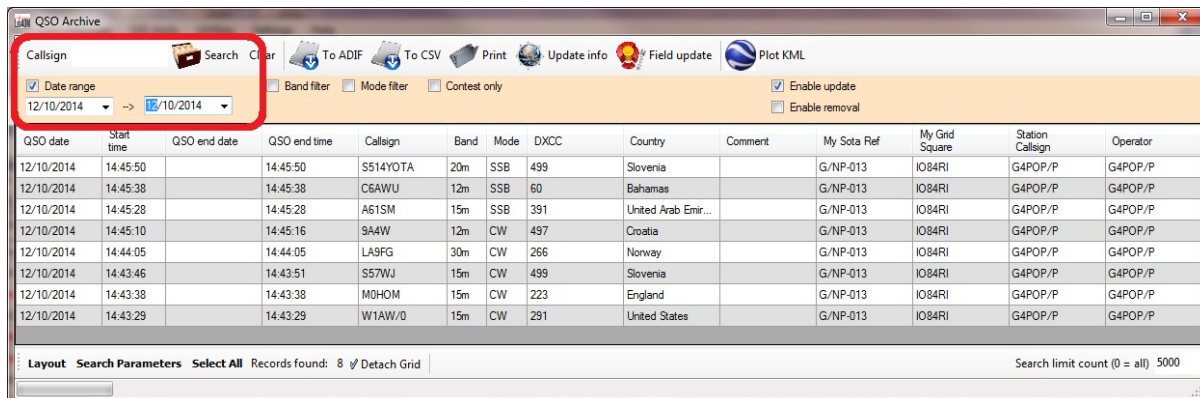
At the bottom of the window, there are several buttons and a checkbox:

- Reset Config (with a plug icon)
- Reset Form positions (with a plug icon)
- \* requires program restart
- Report usage data for statistics (Thanks for enabling)
- Print config (with a printer icon)
- Save config (with a floppy disk icon)

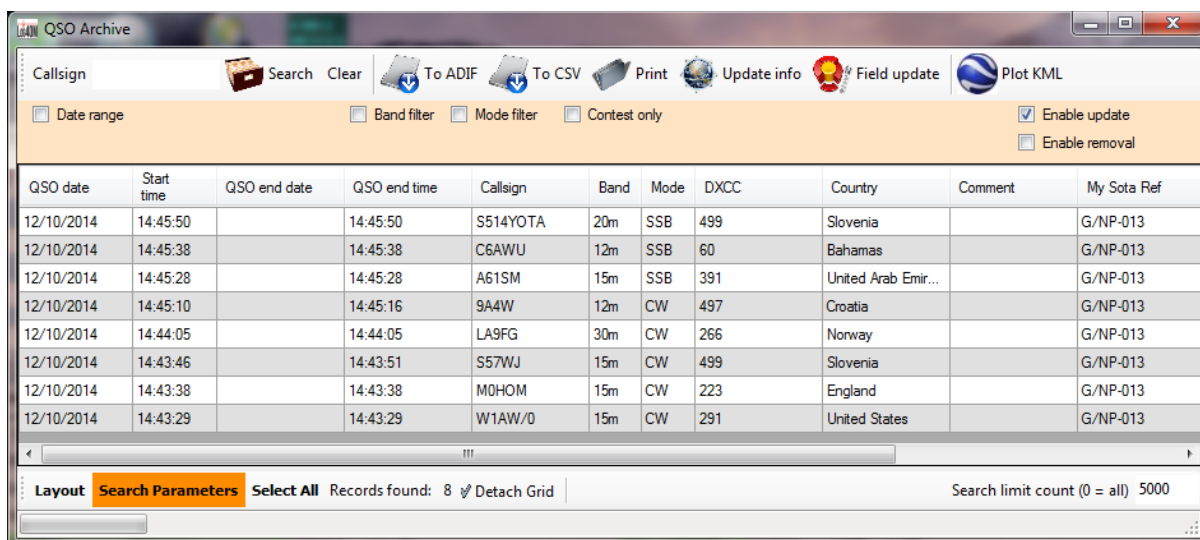
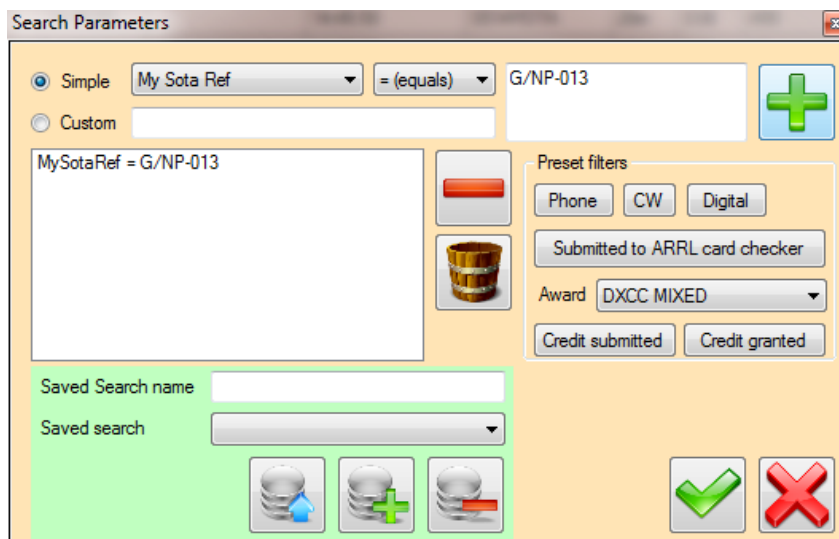
Now each QSO that is made from this location will have the appropriate information recorded in the logbook database for future retrieval.

It is possible to retrieve those QSO that were made at the /P location in many ways in the QSO Archive manager, QSL Manager and Recent QSO windows as follows

**By the Date** that the portable operation n took place in the Archive manager by using the 'Date range' facility as below.




By the 'My SOTA Ref' using the 'Search Parameters'





### By the Locator (Grid Reference)

Search Parameters

Simple My Grid Square = (equals) IO84RI 

Custom






MyGridsquare = IO84RI

Preset filters

Award

Saved Search name   
 Saved search

QSO Archive


Date range
  Band filter
  Mode filter
  Contest only
  Enable update
  Enable removal

QSO date	Start time	QSO end date	QSO end time	Callsign	Band	Mode	DXCC	Country	My Grid Square	Station Callsign
12/10/2014	14:45:50		14:45:50	S514YOTA	20m	SSB	499	Slovenia	IO84RI	G4POP/P
12/10/2014	14:45:38		14:45:38	C6AWU	12m	SSB	60	Bahamas	IO84RI	G4POP/P
12/10/2014	14:45:28		14:45:28	A61SM	15m	SSB	391	United Arab Emir...	IO84RI	G4POP/P
12/10/2014	14:45:10		14:45:16	9A4W	12m	CW	497	Croatia	IO84RI	G4POP/P
12/10/2014	14:44:05		14:44:05	LA9FG	30m	CW	266	Norway	IO84RI	G4POP/P
12/10/2014	14:43:46		14:43:51	S57WJ	15m	CW	499	Slovenia	IO84RI	G4POP/P
12/10/2014	14:43:38		14:43:38	MOHOM	15m	CW	223	England	IO84RI	G4POP/P
12/10/2014	14:43:29		14:43:29	W1AW/0	15m	CW	291	United States	IO84RI	G4POP/P

Layout **Search Parameters** Select All Records found: 8  Detach Grid Search limit count (0 = all) 5000



### By Station or Operator call sign

Search Parameters

Simple Station Callsign = (equals) G4POP/P 

Custom






StationCallsign = G4POP/P

Preset filters

Award

Saved Search name   
 Saved search

QSO date	Start time	QSO end date	QSO end time	Callsign	Band	Mode	DXCC	Country	My Grid Square	Station Callsign
12/10/2014	14:45:50		14:45:50	S514YOTA	20m	SSB	499	Slovenia	IO84RI	G4POP/P
12/10/2014	14:45:38		14:45:38	C6AWU	12m	SSB	60	Bahamas	IO84RI	G4POP/P
12/10/2014	14:45:28		14:45:28	A61SM	15m	SSB	391	United Arab Emir...	IO84RI	G4POP/P
12/10/2014	14:45:10		14:45:16	9A4W	12m	CW	497	Croatia	IO84RI	G4POP/P
12/10/2014	14:44:05		14:44:05	LA9FG	30m	CW	266	Norway	IO84RI	G4POP/P
12/10/2014	14:43:46		14:43:51	S57WJ	15m	CW	499	Slovenia	IO84RI	G4POP/P
12/10/2014	14:43:38		14:43:38	MOHOM	15m	CW	223	England	IO84RI	G4POP/P
12/10/2014	14:43:29		14:43:29	W1AW/0	15m	CW	291	United States	IO84RI	G4POP/P

Similar sorts can be used in the 'recent QSO' window

Date	Start	Callsign	Band	Frequency	Mode	Sent	Rcvd	Name	DXCC	Country	My Sota Ref
12/10/2014	14:45:50	S514YOTA	20m	14,225.000	SSB	59	59	Youngsters On The Air	499	Slovenia	G/NP-013
12/10/2014	14:45:38	C6AWU	12m	24,940.000	SSB	59	59	Travis Williams	60	Bahamas	G/NP-013
12/10/2014	14:45:28	A61SM	15m	21,280.000	SSB	59	59	SALIM MUBARAK	391	United Arab Emirates	G/NP-013
12/10/2014	14:45:10	9A4W	12m								G/NP-013
12/10/2014	14:44:05	LA9FG	30m								G/NP-013
12/10/2014	14:43:46	S57WJ	15m								G/NP-013
12/10/2014	14:43:38	MOHOM	15m								G/NP-013
12/10/2014	14:43:29	W1AW/0	15m								G/NP-013

**NOTE: After the portable operation the 'Options/Station Info' must be changed back to the normal information**

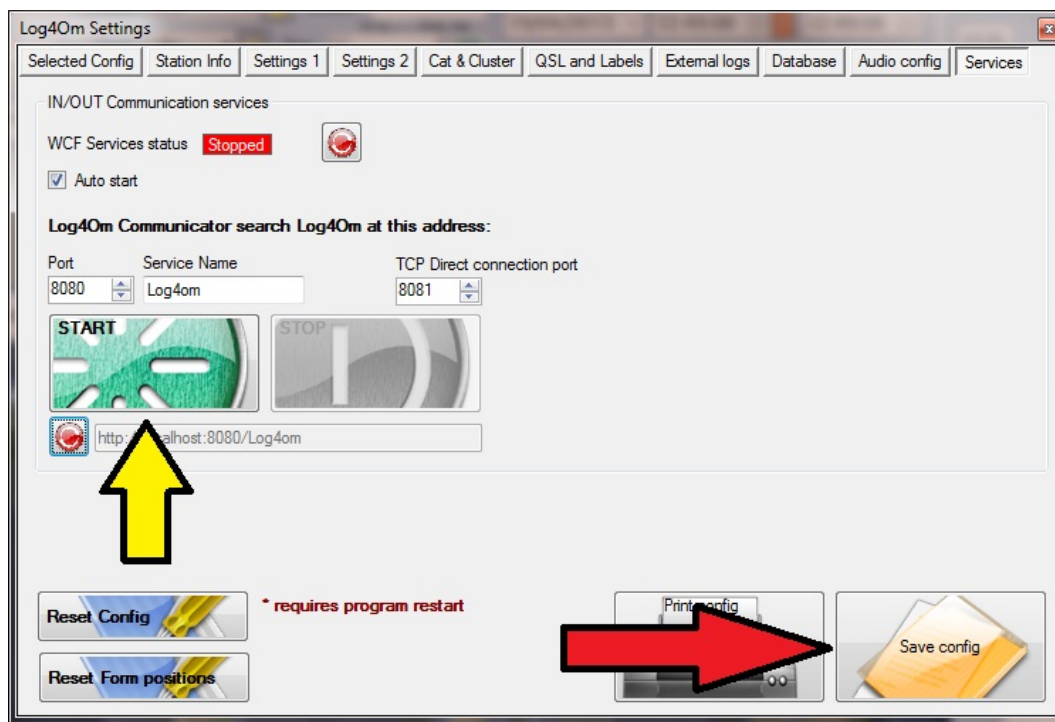
**Alternatively this can be saved as a 'New Configuration' for future recall if the location/operation is frequently repeated**



## Integration with other software

### Starting the external services facility

Select 'Settings' in LOG4OM and click on the 'Services' tab and instruct the program to communicate with other software.

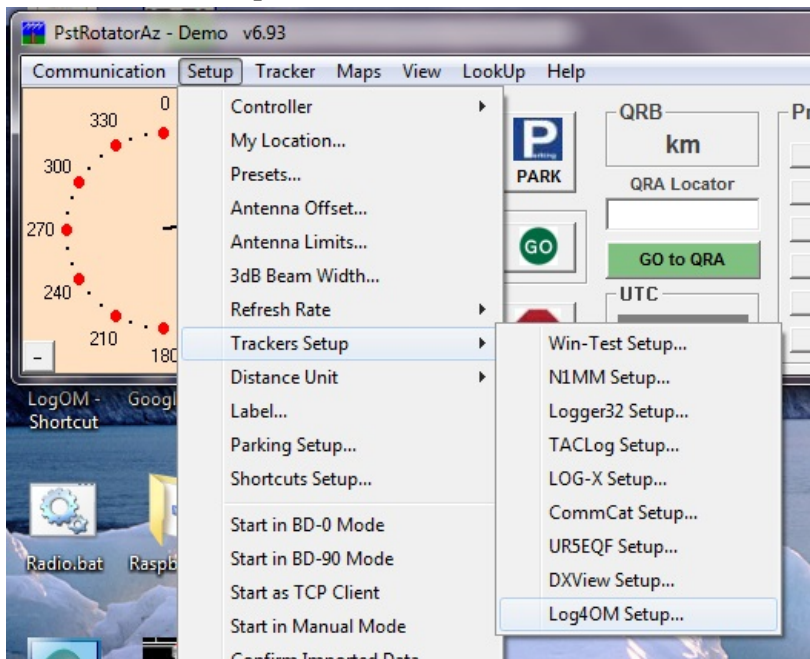


Check the boxes shown, click the green 'Start' button and save the configuration by clicking the 'Save config' button at the lower right of the screen. The Communicator window will now open.

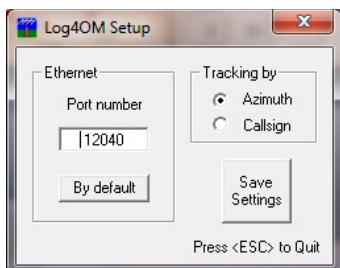
## Rotator Control

LOG4OM interfaces with the fabulous PstRotator AZ program by Codrut YO3DMU which controls a wide range of azimuth and elevation rotators. The trial version of this program can be downloaded from [http://www.gsl.net/yo3dmu/index\\_Page346.htm/](http://www.gsl.net/yo3dmu/index_Page346.htm/). The trial version runs for 10 minutes and then closes if not registered for a small fee.

## PSTRotator set up

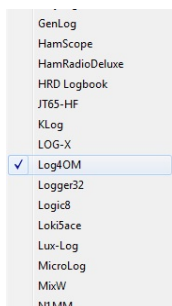


Select the Log4OM setup window from the PSTRotator 'Setup' menu.

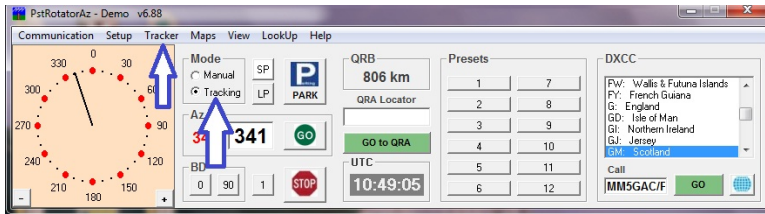


Take note of the Port number for insertion in the Log4OM Communicator PSTRotator set up tab.

In PstRotator select the 'Tracker' menu and select LOG4OM in the Tracker drop down list

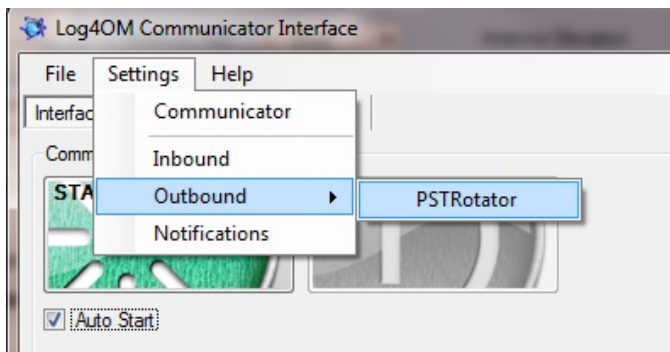


Then set the 'Mode to 'Tracking'.

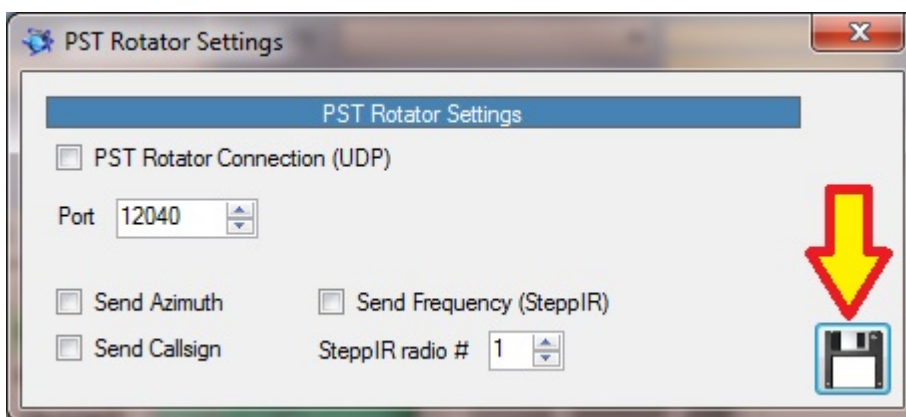


In the Log4OM Communicator

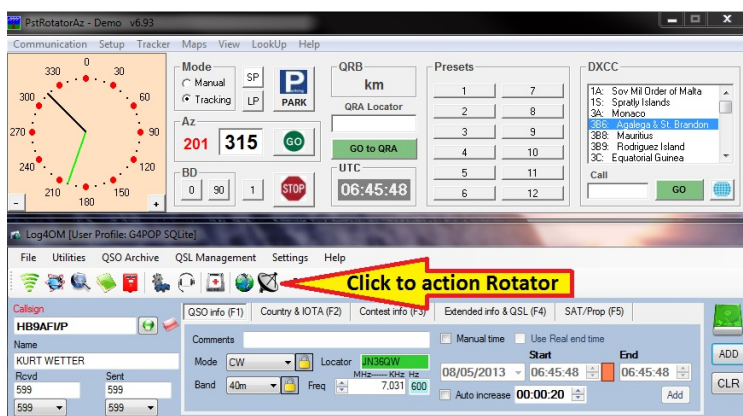
1. Stop the communicator
2. Select "Settings/Outbound/PSTRotator"



3. Check the "PSTRotator Connection (UDP)" box and ensure that the port number matches
4. Check either the "Send Azimuth" or "Send callsign" box
5. If using a SteppIR antenna select this check box.
6. Click the save icon indicated below
7. Close the rotator window
8. Restart Communicator
9. **Minimise the Communicator window – Do not close it!**



Enter a call sign in the input menu of LOG4OM. Then click the rotator icon to instruct PSTRotator to move the rotator onto the short path heading.



Additional rotator control can be found in the drop down menu, alongside of the rotator icon.

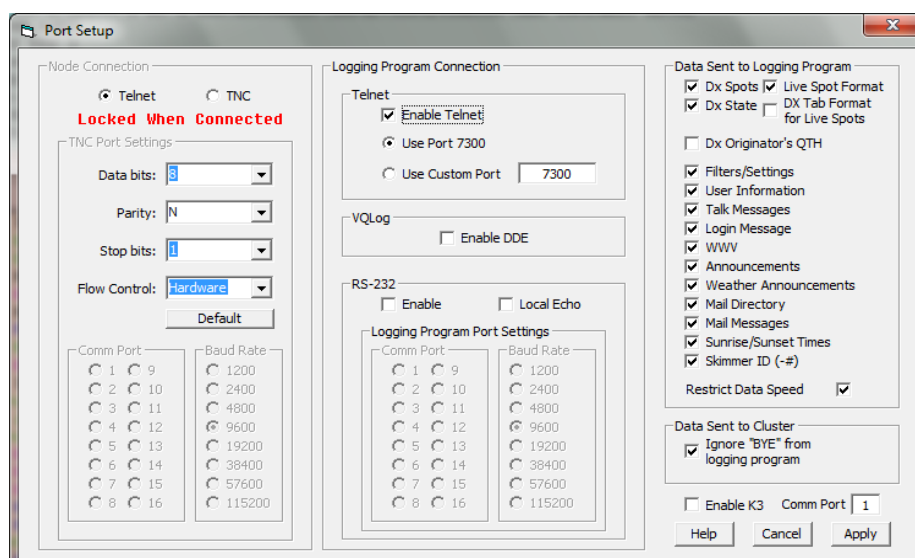


## VE7CC – CC User Program

Apart from using the VE7CC cluster, it is also possible to integrate LOG4OM with the VE7CC DX Cluster Client program – CC User.

Integration with CC User provides the ultimate in DX cluster filtering and management, allowing the user to configure CC User as required and then port the result into LOG4OM.

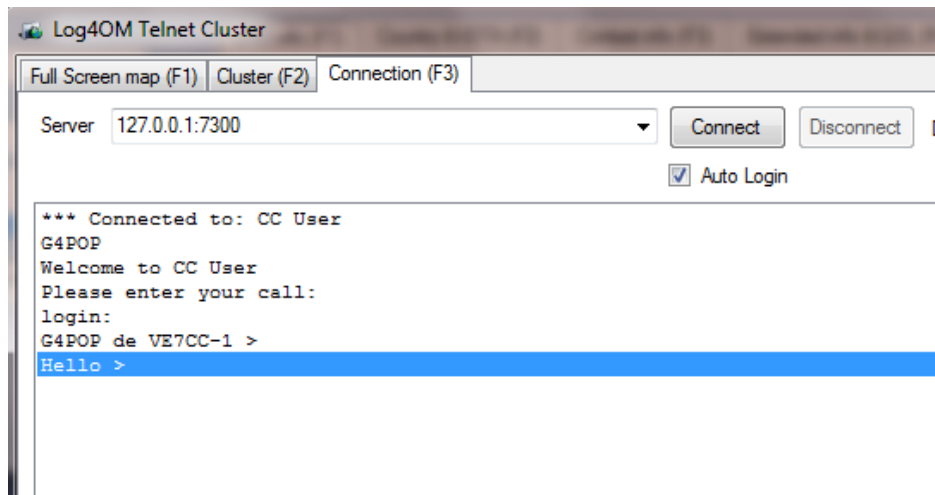
In VE7CC's CC User software go to configuration/ports logging program and check the box 'Enable Telnet' and click Apply.



Connect VE7CC and leave it running.

In LOG4OM go to Utilities/Cluster and click F3.

In the server box, type in 127.0.0.1:7300 and click on 'Connect'.



In the send command drop down sh/mydx - Hit Enter and LOG4OM will then use the filters that have been set in VE7CC.

## AR Cluster Client

Install and set up the AR Cluster Client application.

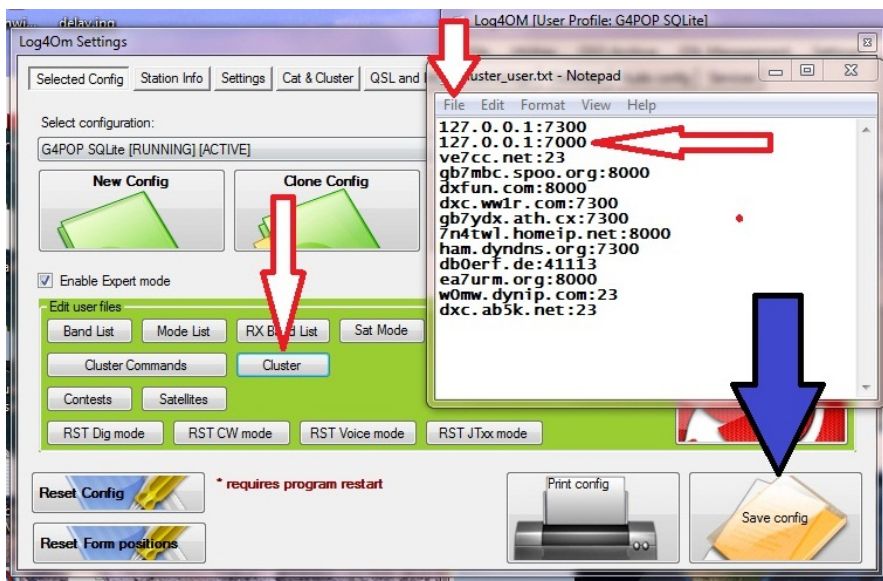
To connect LOG4OM to AR Cluster Client the user has to modify the ArcClient.xml file in the C:\Program Files\AB5K\AR-Cluster Client\Cfg folder by editing the telnet section of the file by setting 'Enabled' to 'True'.

For those that don't feel capable of modifying an xml file there is a modified file in the files section of this user group here : -

<http://f1.grp.yahoo.com/v1/AafGUluNRzhHgpmIsUYGH7p310yLRqlbKssmaG4719vn1zPxN5DpouruwHUuPtpvCKmUi3RlqlJzlWSkrQ45OQ/AR%20Cluster%20file.zip>

Extract the file to the C:\Program Files\AB5K\AR-Cluster Client\Cfg folder and allow it to overwrite the original file.

Now in LOG4OM add a link in the cluster text file to 127.0.0.1:7000



Saved the text file and click the 'Save config' button, now restart LOG4OM.

The new cluster address will now be visible in the cluster connection window.

Start AR Cluster client and then select '127.0.0.1:7000' in the LOG4OM cluster connection screen and click 'connect'.

LOG4OM is now receiving the spots directly from the AR Cluster application.

## Virtual Serial Ports explained

Virtual Serial Ports (VSP) can provide many functions but probably the most important is the “Splitter” which can provide multiple VSP connections to a single physical serial (Com) port.

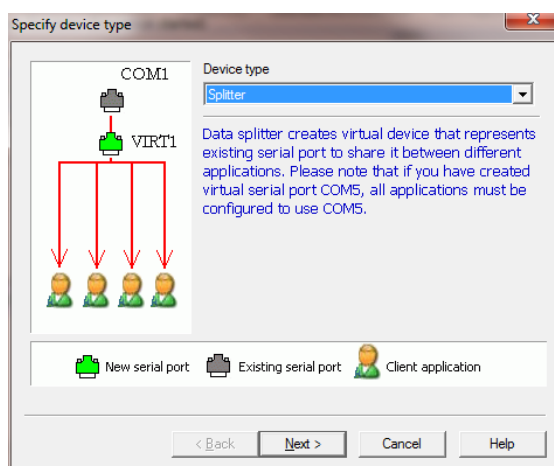
There are many different VSP programs and they all vary in versatility and cost, this guide will feature the Eterlogic VSP Emulator which is free for the 32 bit Windows O/S version, with a small charge for the 64 bit version.

The Eterlogic VSP Emulator can be downloaded from:

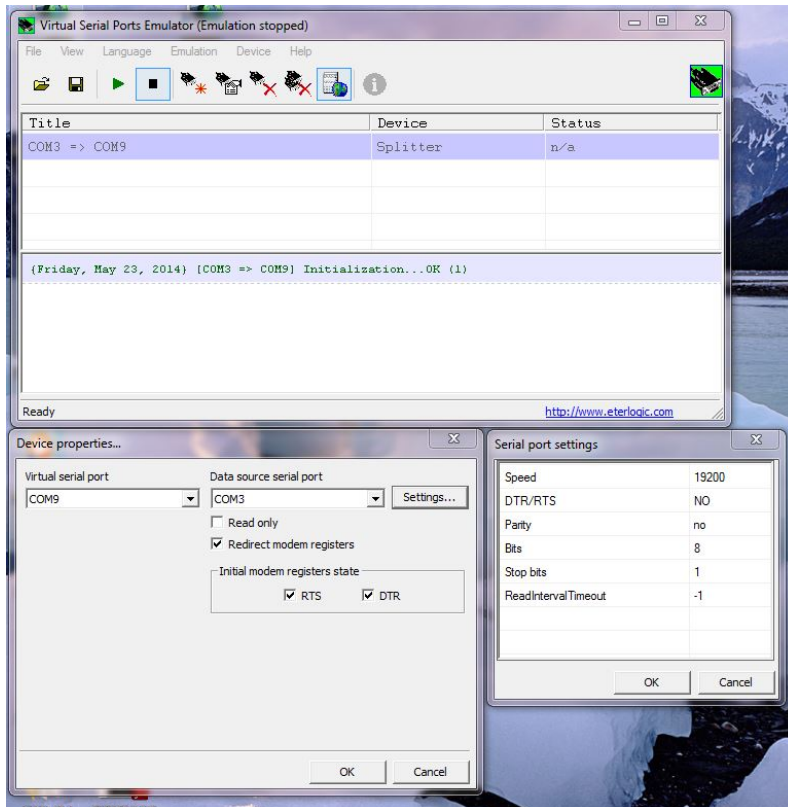
<http://www.eterlogic.com/Products.VSPE.html>

Once downloaded and installed a VSP splitter should be created as follows:

1. Select “Device” and then “Create” from the Eterlogic drop down menu’s
2. In the resulting window select “Splitter” from the drop down list and click ‘Next’



3. In the “Virtual Serial Port” field select a number for the new VSP com port – Select a Com port that is not in use already.
4. In the “Data Source Serial Port” field select the physical Com port to which the radio is connected.
5. Check ‘Redirect modem registers’, ‘RTS’ & ‘DTR’
6. Click on “Settings” and ensure that the Baud rate and other settings match those selected in the Radio’s menu.



### Important Notes:

1. When the Virtual Serial Port has been set up all future CAT connections must be made to the VSP (Com 9 in the example above)
2. Trying to connect to the physical Com port will result in failure if the VSP is running.
3. Connecting to the physical Com port before starting the VSP will result in the VSP failing to work.

The next page graphically illustrates how many different programs including Omnirig can use a VSP splitter.

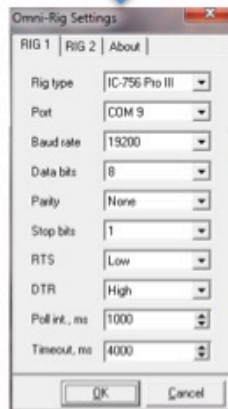


### VSP and Omnirig

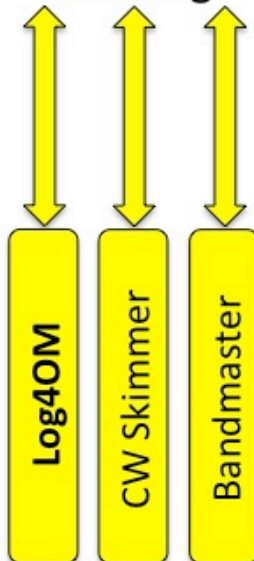


All com ports & Software must be set to the same Baud rate that is selected in the radio menu

Radio CAT Com Port - e.g. Com 6



### Omnirig



Any programs that can use Omnirig



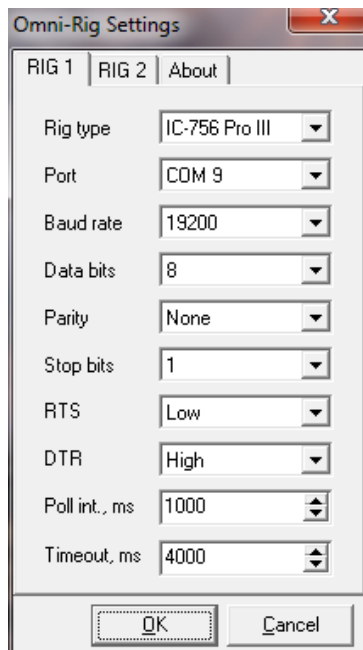
### WSJT

Any software that requires a CAT Connection – Eterlogic VSPM allows a maximum of eight Com connections

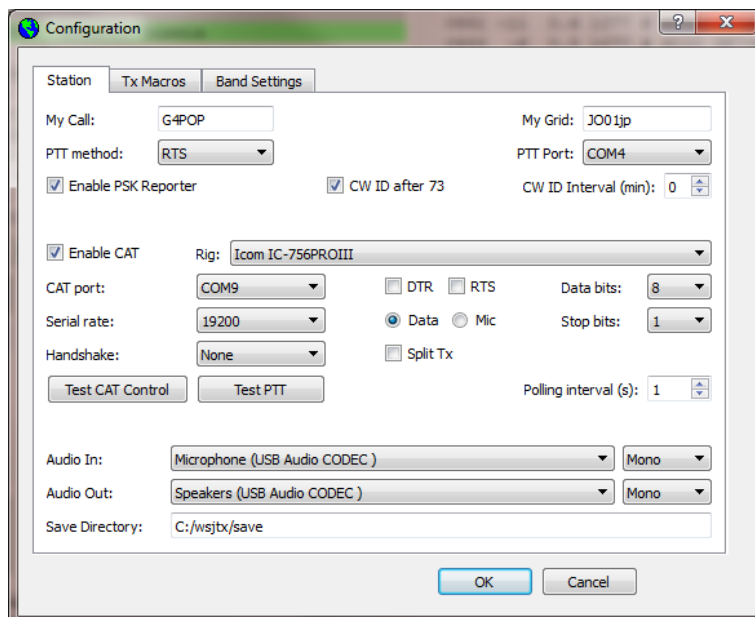


### SDR-Radio

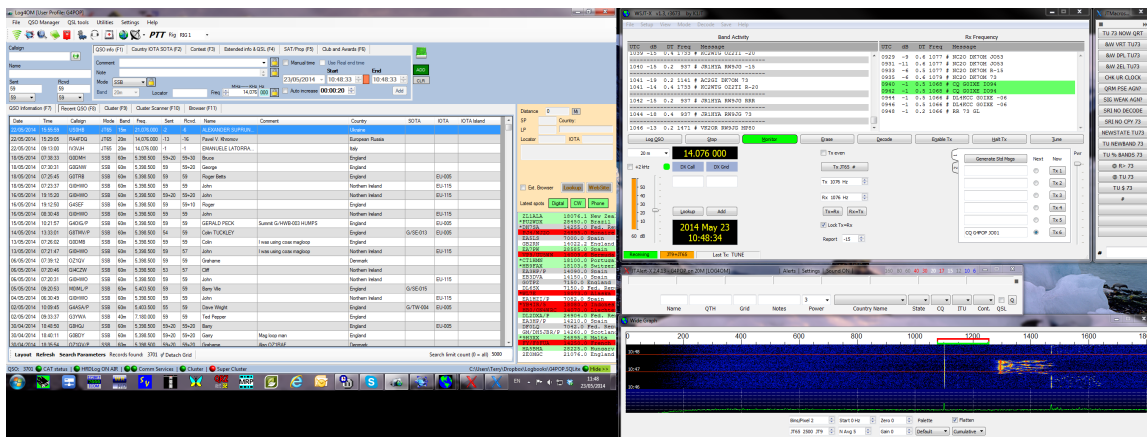
### Omnirig menu using a VSP Splitter Com 9 to connect to an Icom ProIII



### A WSJT-X "Configuration" menu using a VSP Splitter Com 9 to connect to an Icom ProIII



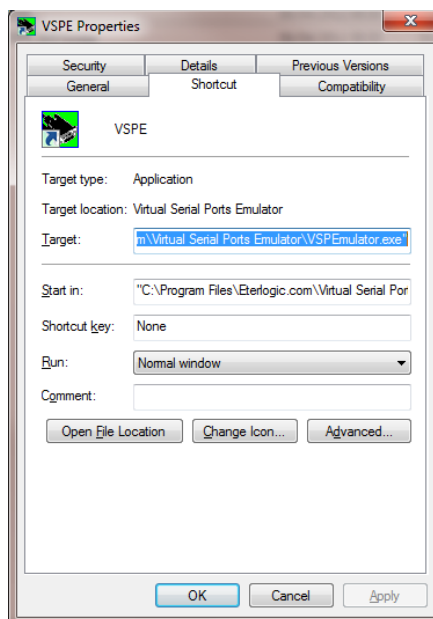
Log4OM using Omnirig connected to a VSP (Com 9) with WSJT-X connected to the same VSP (Com 9) both programs fully synchronized and displayed on dual monitors



### How to make the VSP Emulator auto run by using a command line shortcut.

If you want to automatically load virtual devices configuration at Windows startup, please follow the steps shown below:

1. Create configuration and save it using "File => Save as..." command. Remember config file location (for example it can be c:/config.vspe)
2. Create windows shortcut. If you have installed VSPE at default location ("C:\Program Files\Eterlogic.com\Virtual Serial Ports Emulator") shortcut parameters must be as shown below:
  - Target: "C:\Program Files\Eterlogic.com\Virtual Serial Ports Emulator\VSPEmulator.exe" - minimize -hide\_splash c:/config.vspe
  - Start in: "C:\Program Files\Eterlogic.com\Virtual Serial Ports Emulator"



3. Move the created shortcut to the "Start Menu\Programs\Startup" folder.

## JT65-HF & JT Alert Integration

The excellent JT65 software from Joe Taylor K1JT can be interfaced to send logged QSO's to the Log4OM logbook automatically by using JT Alert written by Laurie VK3AMA.

Download sites

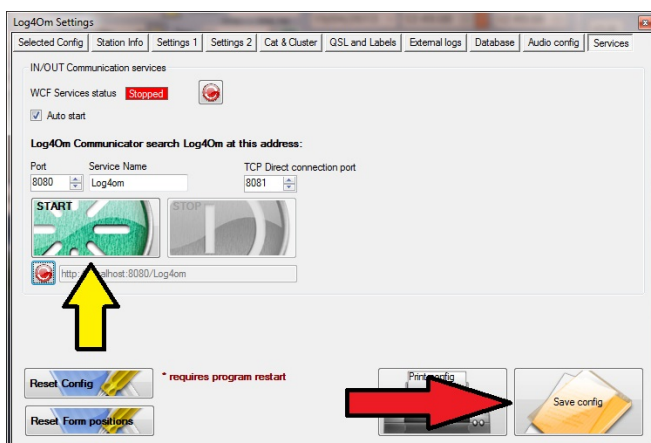
JT65-HF Comfort from <http://jt65-hf.com/files/setup-JT65-HF-1093.exe>

JT Alert from [http://hamapps.com/dnl/JTAlert/HamApps\\_JTAlert\\_2.4.13\\_Setup.exe](http://hamapps.com/dnl/JTAlert/HamApps_JTAlert_2.4.13_Setup.exe)

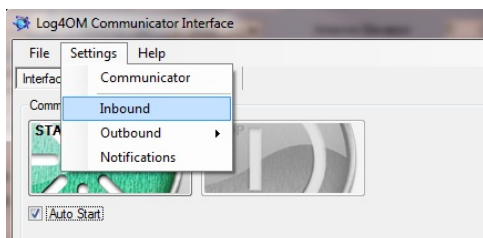
Please also study the relative user guides.

JT Alert sends QSO's logged in JT65 to Log4OM by using the inbound UDP connection in the Log4OM Communicator so the user must ensure the following steps are taken:

1. Select 'Settings' in LOG4OM options and click on the 'Services' tab
2. Instruct the program to communicate with other software.

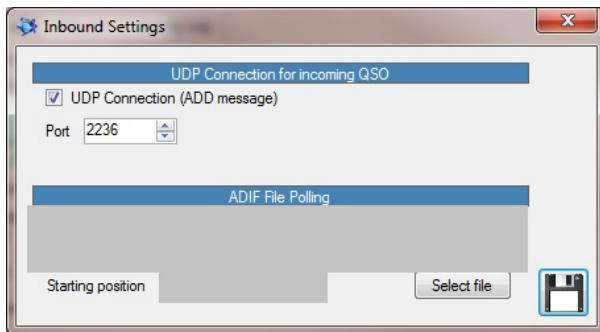


3. Check the boxes indicated.
4. Click the green 'Start' button.
5. Save the configuration by clicking the 'Save config' button at the lower right of the screen. - The Communicator window will now open.
6. Stop the Communicator and select Settings/Inbound



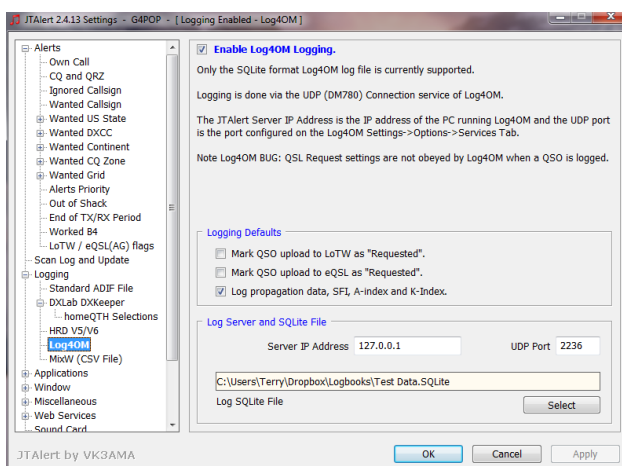
## Inbound messages by UDP

- Check the 'UDP Connection (Add message)' check box.
- Insert the Port number e.g. Port 2236 for incoming data from JT Alert
- Click the 'Save' button
- Restart the Communicator
- **Minimise** the Communicator window – **Do not close it!**



In the JT Alert software navigate to the “Settings” menu

1. Select the Logging/Log4OM window from the list on the left
2. Check the 'Enable Log4OM Logging' check box
3. Choose the 'Logging Defaults' required
4. Ensure that the 'Server IP Address' is set to 127.0.0.1 if the Log4OM SQLite logbook is on the local computer.
5. Set the 'UDP Port' to 2236
6. Navigate to the users SQLite logbook file using the 'Select' button e.g. C:\Users\*Your user name*\Documents\G4POP.SQLite
7. Click 'OK'



8. Restart all programs (Log4OM, and its Communicator, JT65-HF and JT Alert must all be running for QSO's to be transferred to Log4OM from JT65-HF)

**IMPORTANT: JT65 does NOT trigger the PTT when using Omnirig the user must either enter a PTT com port in the “PTT Port” field of JT65 or use VOX**

## Digital Master 780 integration

Digital Master is part of the HRD suite of programs for digital modes.

Having downloaded and installed the HRD software, set up both programs.

### Step 1

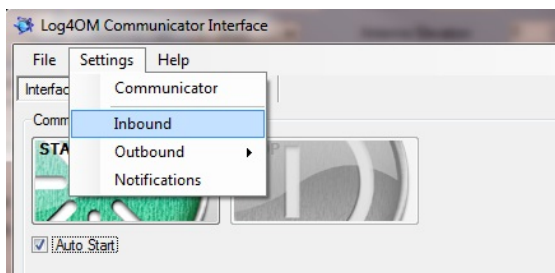
Select 'Settings' in LOG4OM and click on the 'Services' tab and instruct the program to communicate with other software.

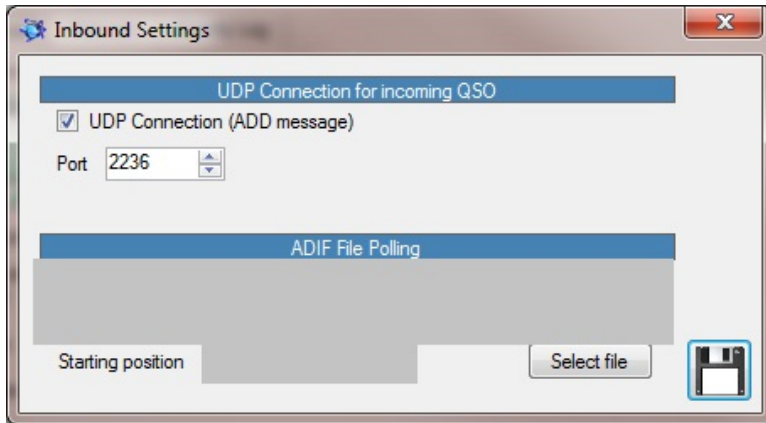


Check the boxes shown, click the green 'Start' button and save the configuration by clicking the 'Save config' button at the lower right of the screen.

The Communicator window will now open.

Stop the Communicator and select Settings/Inbound





### Inbound messages by UDP

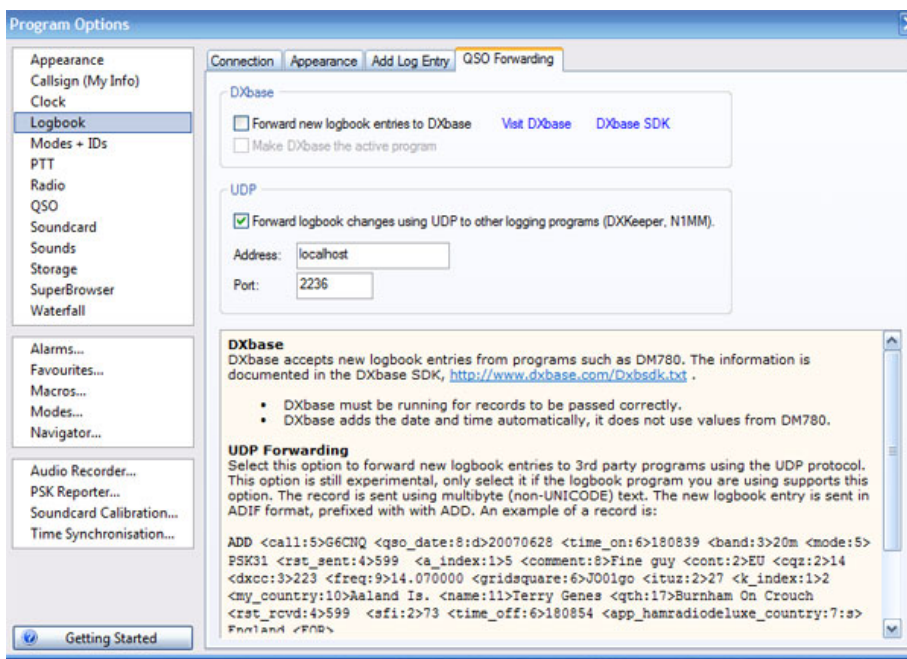
- Check the 'UDP Connection (Add message)' check box.
- Insert the Port number e.g. Port 2236 for incoming data from DM780.
- Click the 'Save' button
- Restart the Communicator
- **Minimise** the Communicator window – **Do not close it!**

### Step 2

In the DM780 Program Options window below, select 'Logbook' from the list on the left of the screen and then select the QSO Forwarding tab.

Ensure 'Forward logbook changes using UDP to other logging programs' check box is checked. Set the 'Address' to localhost and the 'Port' to 2236.

Close the Program Options window and restart DM780.



### How to use DM780

1. Start HRD, HRD Logbook and DM780 in the normal way with HRD connected to the radio.
2. Start LOG4OM.

DM780 will do the call lookup using the HRD logbook and obtain the frequency from the HRD in the normal manner.

LOG4OM will not display the radio frequency because it is not connected to the radio. However, when working a station using DM780, the QSO will be logged to both the HRD logbook and the LOG4OM logbook.

The screenshot shows the Digital Master 780 software interface. The main window displays a QSO log entry for station BPSK-31. The entry details include:

- NAME : Agatino Agatino
- QTH : Adrano Adrano
- LOC : JM77bP [141.0° 1,876.0km] JM77KP [139.2° 1,909.3km]
- Sicily Sicily - Italy Italy
- Info : [www.qrz.com](http://www.qrz.com)

The log entry text shows a QSO on 20m, with the call sign EA5IBM and the name Agatino. The text includes: "My QSL is OK via eQSL.cc", "How copy? BTU OM, EA5IBM de IT9BWU pse kn eeli U on lemei -- r IT9BWU de EA5IBM 73 Agatino and thanks for this BPSK-31 QSO on 20m, good DX in 2012", "IT9BWU de EA5IBM sk eon EA5IBM de IT9BWU 73 EA5IBM and thanks for PSK31 QSO on 20m.", "Good DK's Bye Bye CIAO CIAO", "EA5IBM de IT9BWU sk e a a leh i iie", "ee r ro i e", and "eit".

The interface also shows a waterfall display at the bottom, indicating the current frequency is 14.070.000 MHz. The status bar at the bottom shows CPU usage at 3%, Audio at 28%, and HRD Logbook: G4POP.



## FLDigi Integration

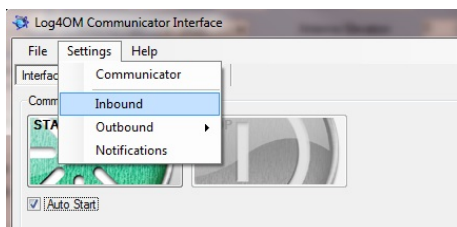
Select 'Settings' in LOG4OM and click on the 'Services' tab and instruct the program to communicate with other software.



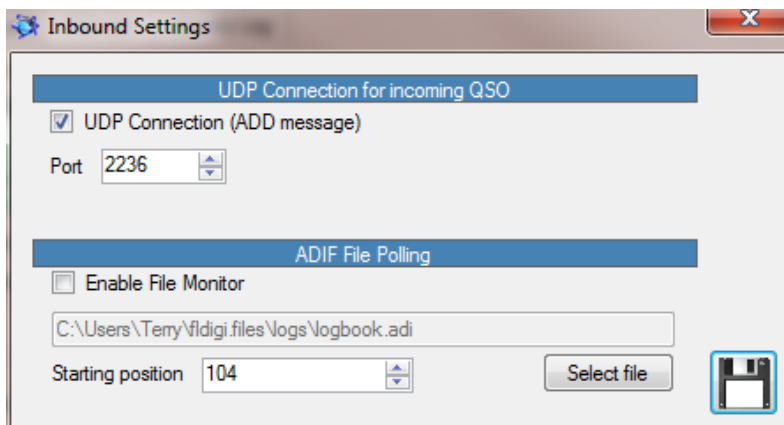
Check the boxes shown click the green 'Start' button and save the configuration by clicking the 'Save Config' button at the lower right of the screen.

The Communicator window will now open.

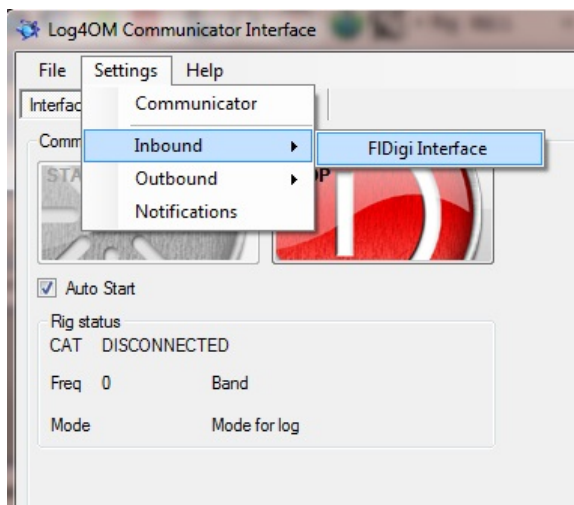
- Stop the communicator
- Select Settings/Inbound



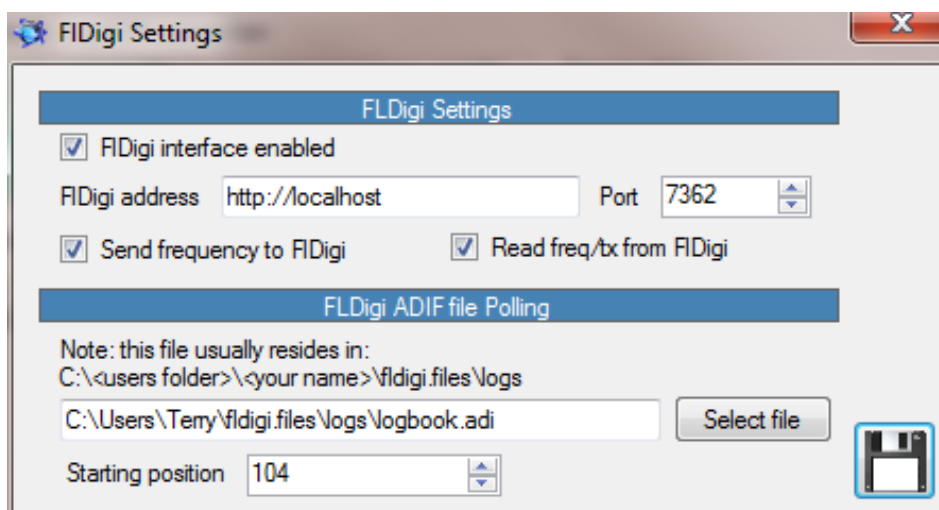
- In the communicator "settings/Inbound" disable "ADIF File Polling" and save the setting



- Select the Communicator "Settings/Inbound/FLDigi interface" menu

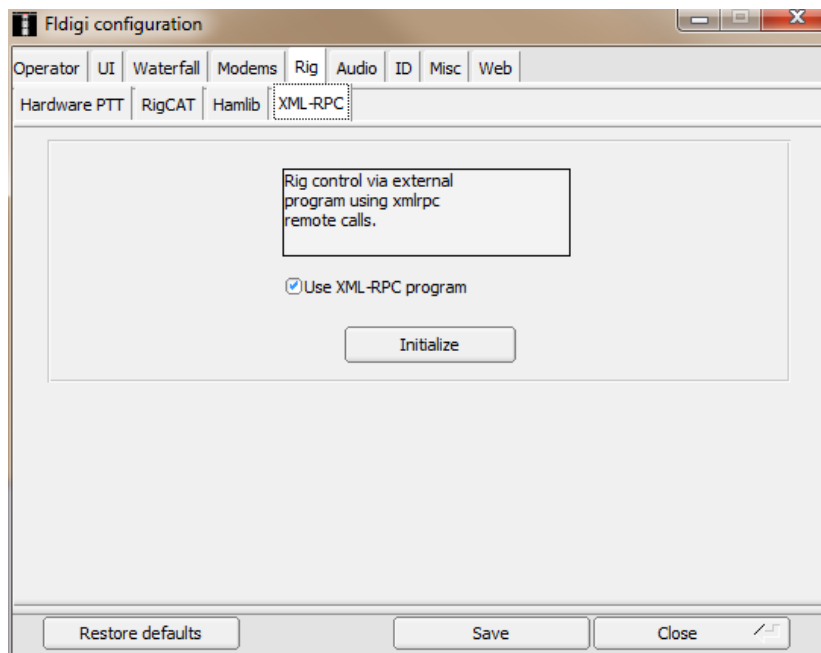


- Check "FLDigi Interface enabled" and "Send Frequency to FLDigi"
- Ensure the 'FLDigi address' is 'http://localhost' and the "Port" is set to '7362'
- Enter the path to the FLDigi logbook file - Its probably C:\Users\YOUR USER NAME\fldigi files\logs\logbook.adi



- Click the 'Save button'
- Restart Communicator
- **Minimise** the Communicator window – **Do not close it!**
- In FLDigi in rig configuration disable any existing CAT control like Hamlib

- XML-RPC to enabled and initialize it - Save and exit the rig configuration screen



- Restart both programs

### **In use**

FLDigi support provides frequency, Mode and QSO exchange, Log4OM connects to the rig and sends the frequency and mode to FLDigi.

Clicking on a cluster spot in Log4OM sends the data to FLDigi and when a QSO is added in FLDigi it is saved to Log4OM, thus providing tight integration between the two programs.

**Start the FLDigi program before starting Log4OM**

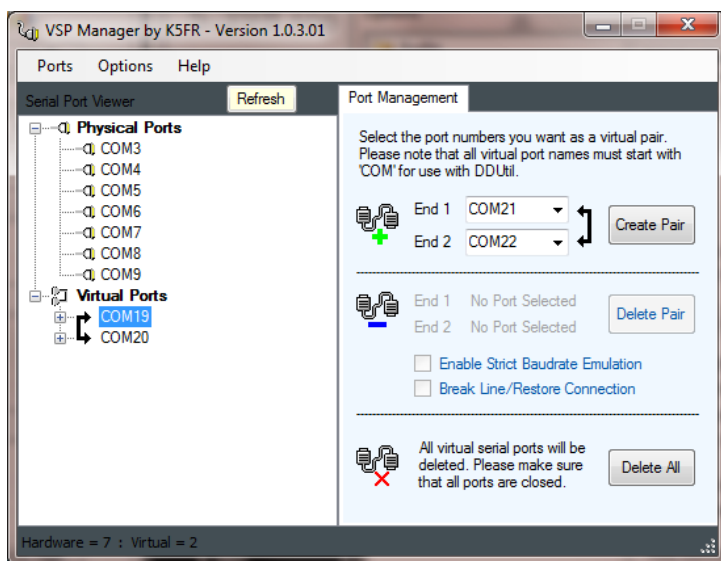
PLEASE NOTE THAT CHANGING FREQUENCY AND MODE IN FLDIGI WILL NOT CHANGE THE FREQUENCY AND MODE IN LOG4OM OR ANY RIG THAT IS CONNECTED

## SDR-Radio Integration

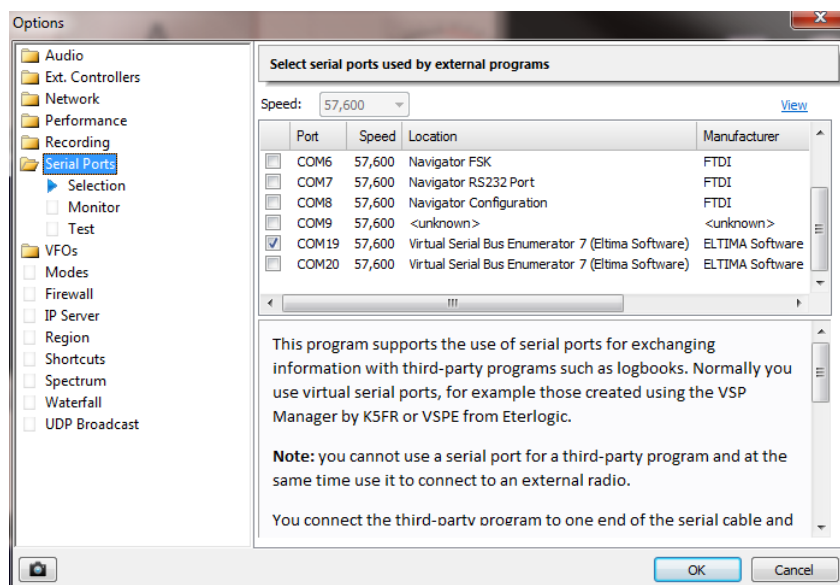
Simon Brown HB9DRV has added a Com port facility into his SDR software to enable Log4OM to communicate with SDR-Radio Consul this makes possible the exchange Frequency, mode, VFO information.

This is achieved by using a VSP Pair (Cable), as in the free K5FR VSP Manager software, between the two programs. This is separate to the normal CAT control for the rig.

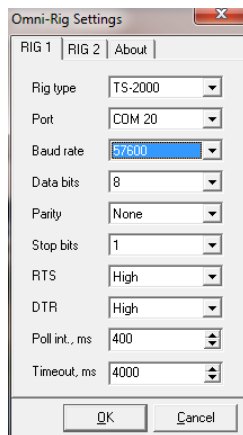
1. Install the free K5FR VSP Manager
2. Set up a pair of virtual ports in VSP Manager



3. In SDR-Radio Consul go to the Options/Serial Ports screen
4. Select one end of the VSP Pair created in VSP manager (Com 19 in the example)

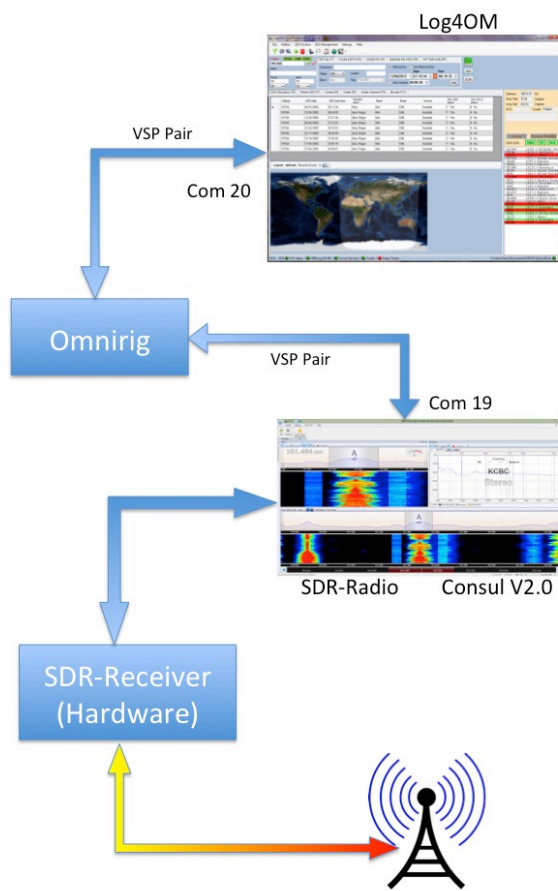


5. In Log4OM open the “CAT Connection” window
6. Select a Kenwood TS2000
7. Select the com port on the other end of the VSP Pair (Com 20 in the example)
8. Select 57600 for the Baud rate
9. Click OK



The frequency and mode should now synchronise between Log4OM and SDR-Radio Consul.

Below is a graphic that describes the setup:



## **Installing a MySQL Database**

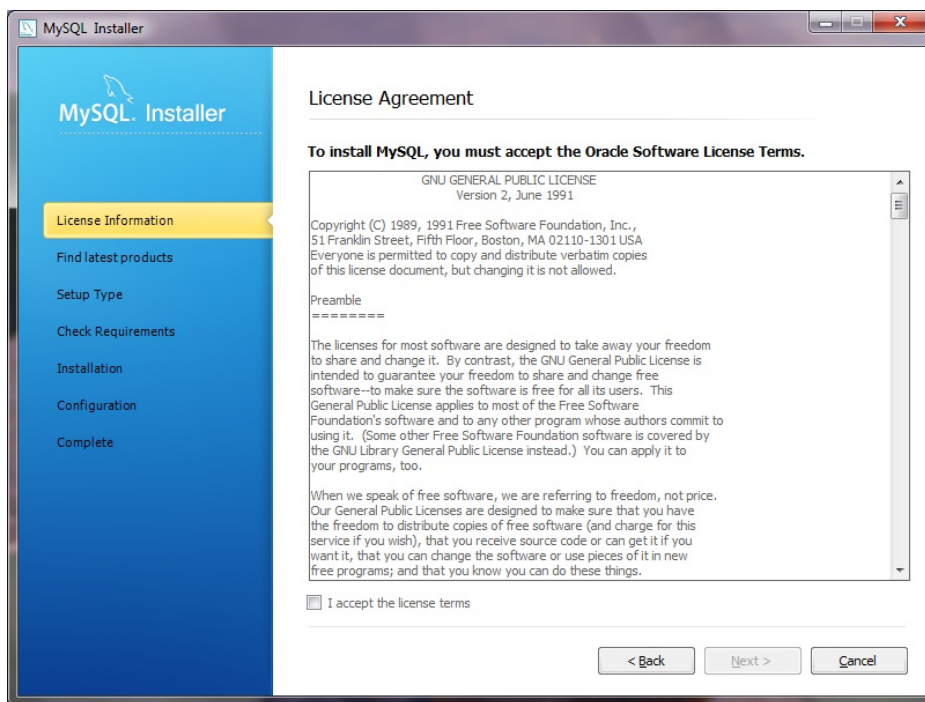
The standard SQLite database can accommodate up to 120,000 QSOs therefore, the only reason to install a MySQL database is if it is required for multiple operator situations, e.g. contest or DXpedition logging, or for use over a local network. The installation of a MySQL database has become much easier now that MySQL is able to install all the necessary components.

Download from this link <http://dev.mysql.com/tech-resources/articles/mysql-installer-for-windows.html>

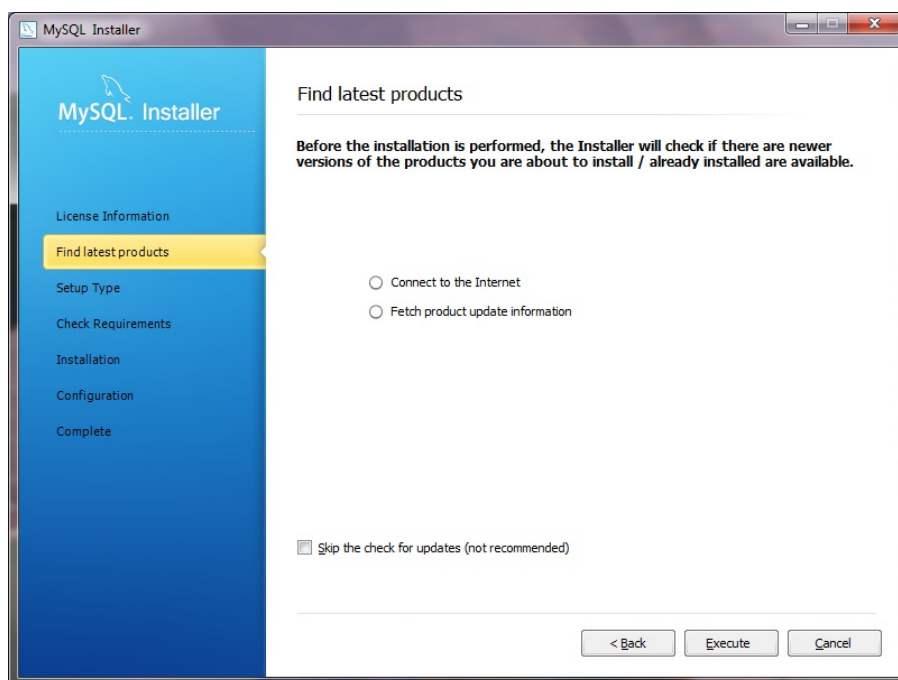
The following screen shots require no explanation and offer step-by-step instructions for both the download and installation procedures.



**Select 'Install MySQL Products'**

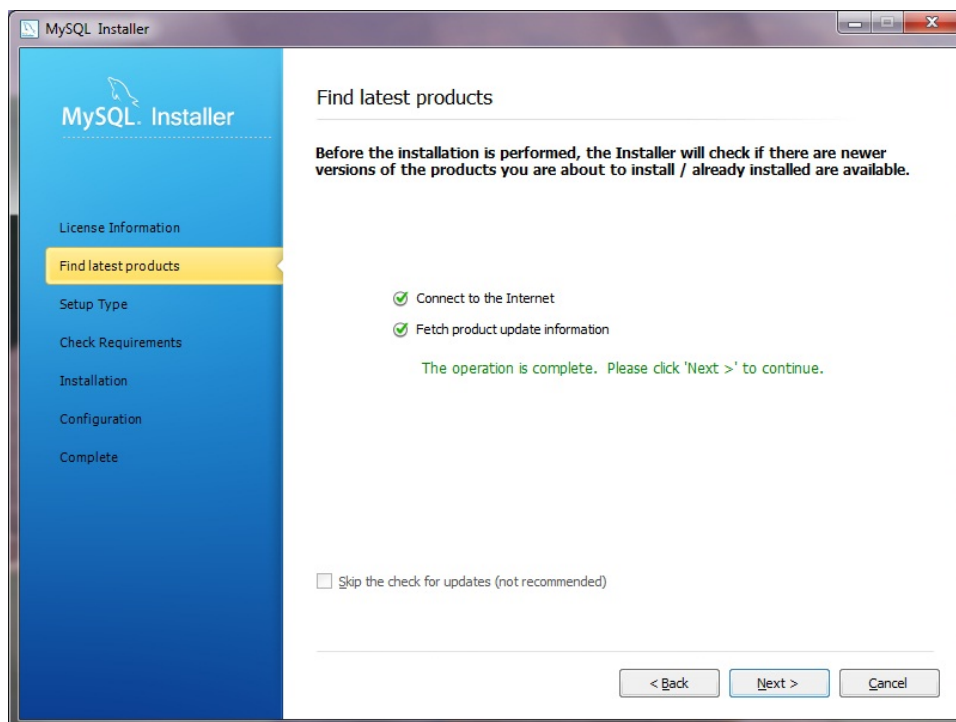


### Accept the licence terms

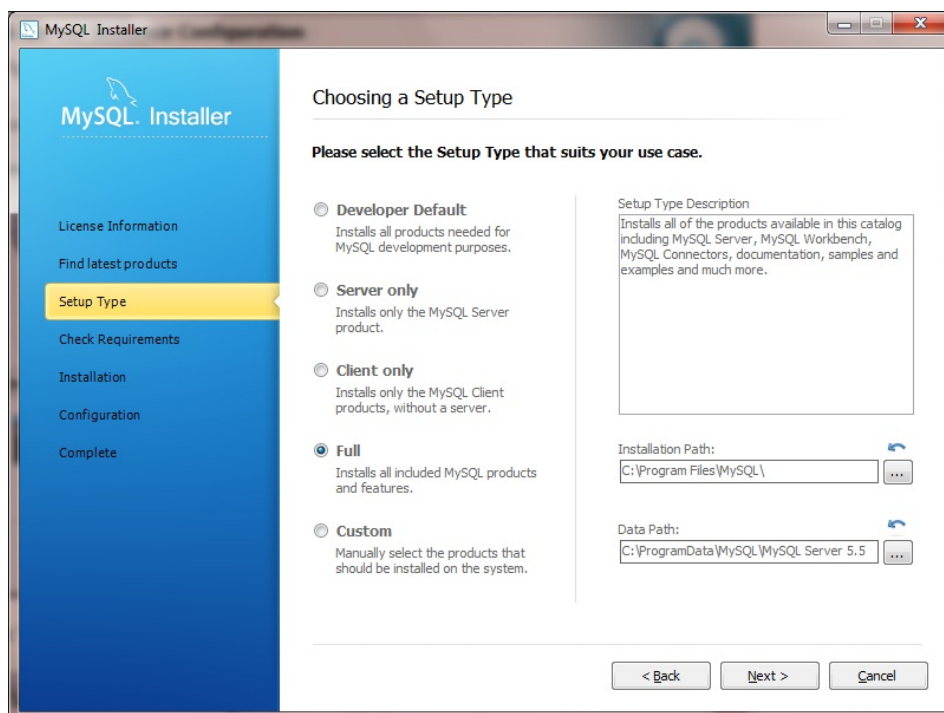


### Update from the Internet

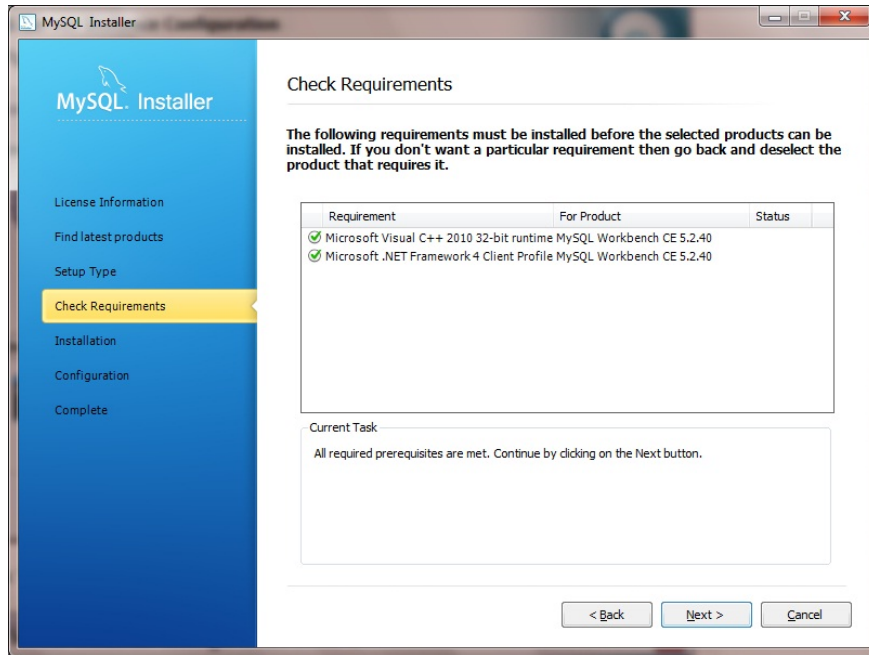




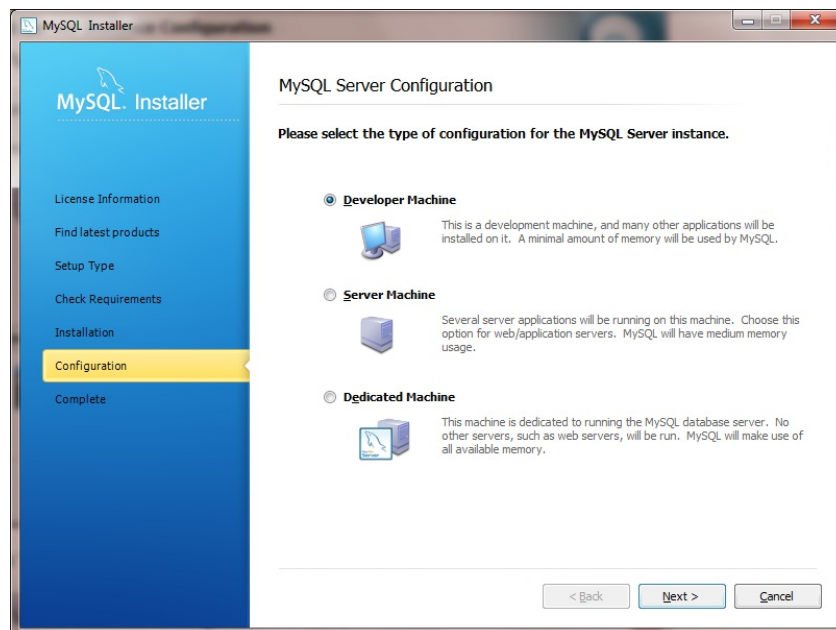
## Updated



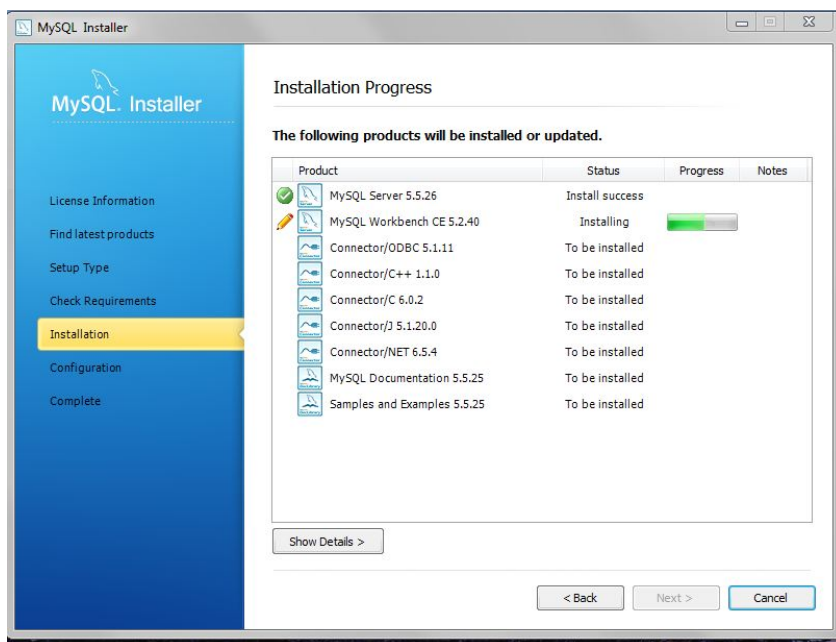
## Choose 'Full' install



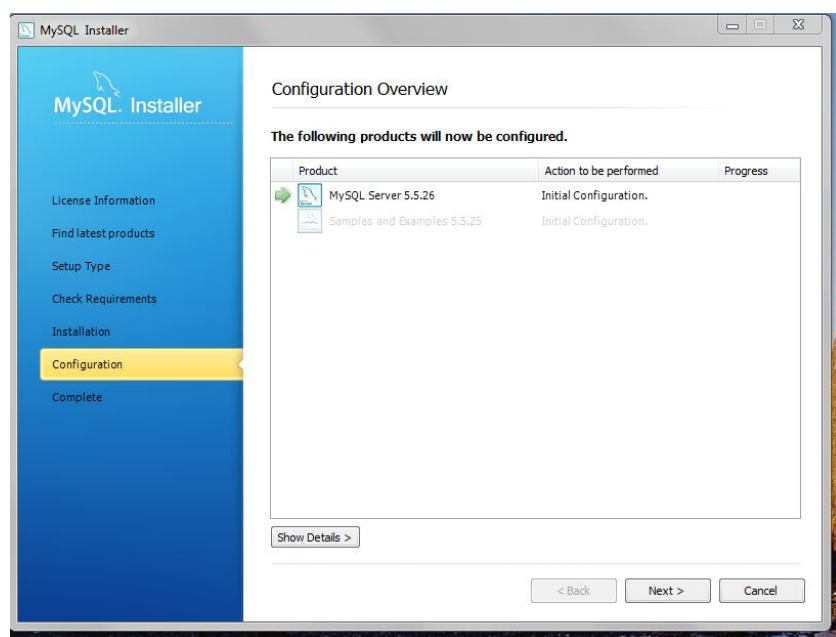
**Click 'Next'**



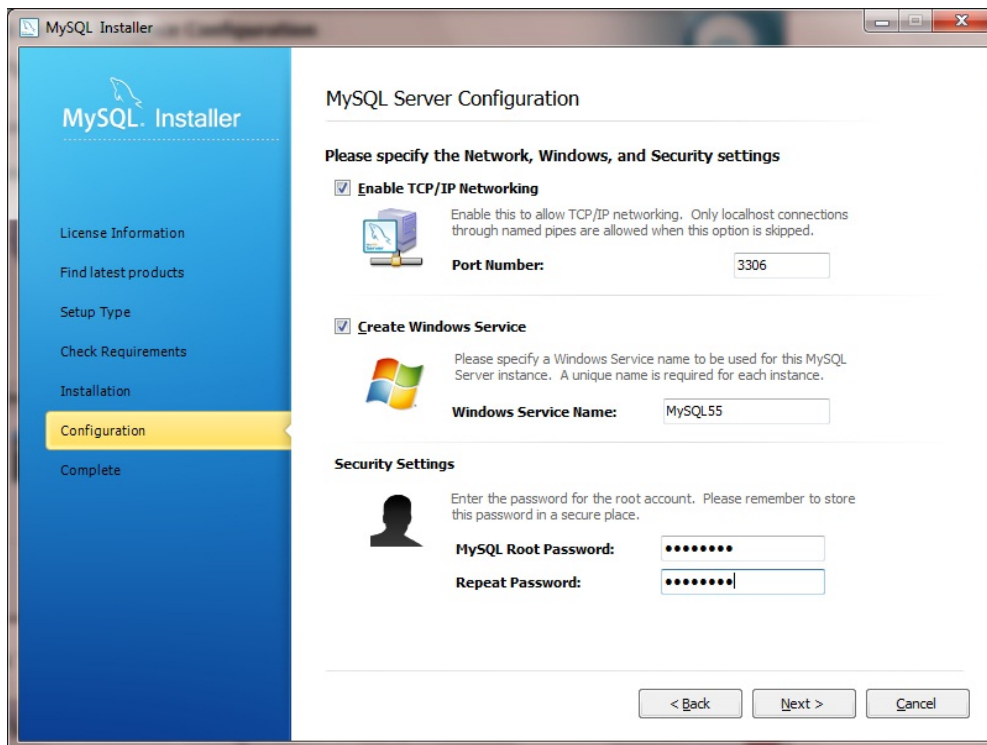
**Select the 'Developer Machine' option, which should be adequate.**



**Click 'Next'**



**Click 'Next'**



**Provide a password and make a note of all the settings.**

**Click 'Next' and the installation is complete.**

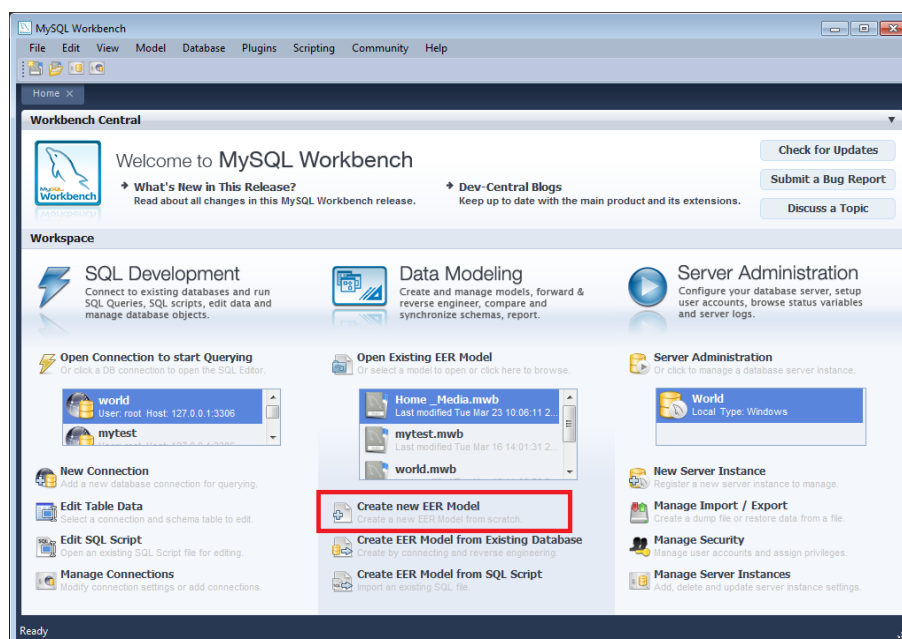
**Open the MySQL Workbench and follow the set up instructions given below.**

## How to create a Model

Instructions are given in this section on how to create a new database model, a table, an EER Diagram of the model and, then, forward engineer the model to the live database server.

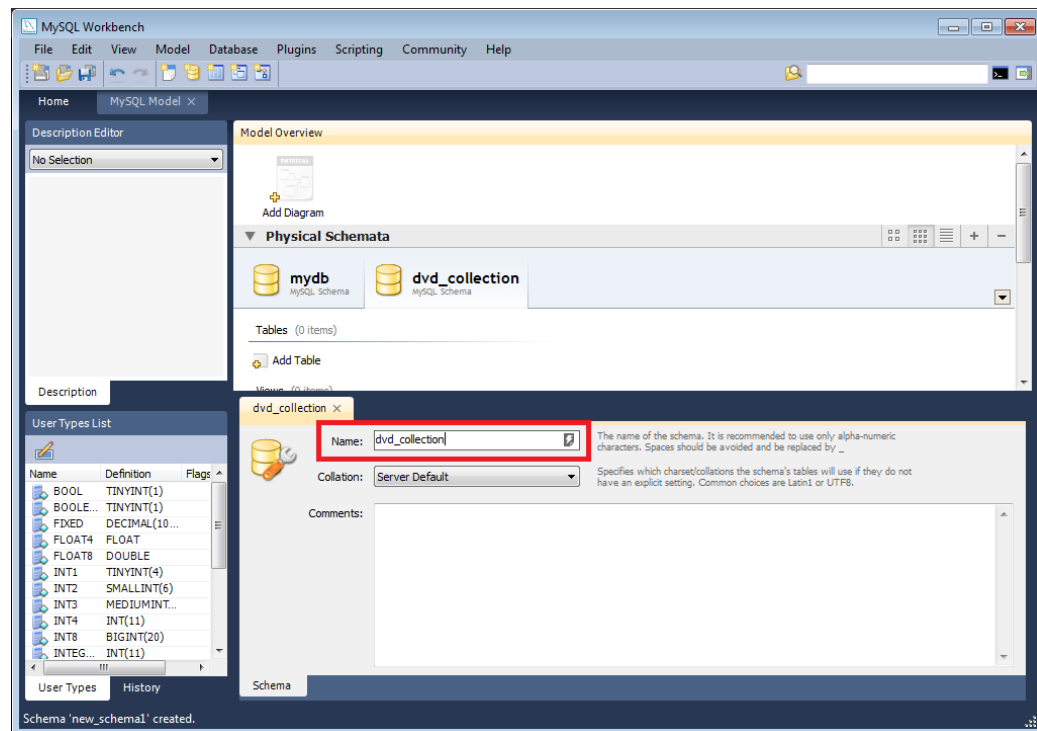
1. Start 'MySQL Workbench'. On the Home window, select '**Create new EER Model**'. A model can contain multiple schemata. Note that when a new model is created, it contains the **mydb** schema by default. The name of this schema can be changed or deleted to suit individual requirements.

### Home Window



2. On the Physical Schemata toolbar, click the + button (framed in red in the screen shot above) to add a new schema. This will create a new schema and display a tab sheet for the schema. In the tab sheet, change the name of the schema to '*A name that is easy to remember such as the appropriate call sign*', by typing into the field called '**Name**'. Ensure that this change is reflected on the Physical Schemata tab. Now add a table to the schema. **If** a message dialog appears requesting permission to rename all schema occurrences, click 'Yes' to apply the name change.

## New Schema



3. Ensure that the new model is saved by clicking '**Save Model to Current File**' on the main toolbar.

## Setting up a LOG4OM MySQL database

Go to the 'LOG4OM Settings'/Database window and select 'Use MySQL'. LOG4OM will set up the required schema and tables in MySQL.

Log4Om Settings

Station Info's | Settings | Cat & Cluster | QSL and Info | External data | Database | Audio config | Services

Use SQLite

Use MySQL

NOTE: The Username for log database is NOT the MySQL admin. The MySQL Admin is the user that you've selected when creating database

The username and password to connect to database (by default) is: DatabaseName + "User". If your database is "myfirstdatabase" your user/password for access are "myfirstdatabaseUser"

MySQL informations

MySQL Address: localhost Port: 3306

Database name: G4POP

Username: G4POPUser Password: G4POPUser

Deploy MySQL Database

MySQL Address: localhost Port: 3306

Database name: N2LWD

MySQL Admin: root

MySQL Password: \*\*\*\*\*

This will remove all data from existing database

Select all checkboxes to confirm operation

✓ ✓ ✓ ✓ ✓ ✓ ✓

Create dataase

Check connection

Switch to MySQL

Reset Config \* requires program restart

Reset Form positions

Print config

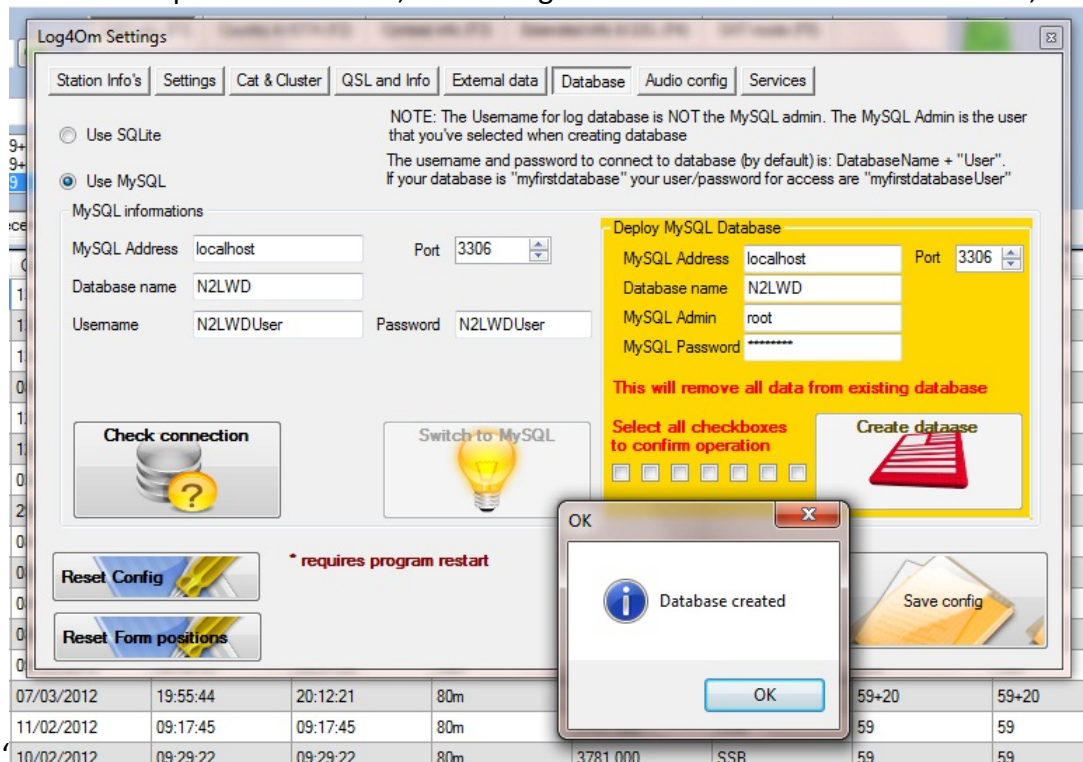
Save config

***Ignore the fields to the left because they will be completed automatically after setting up the database.***

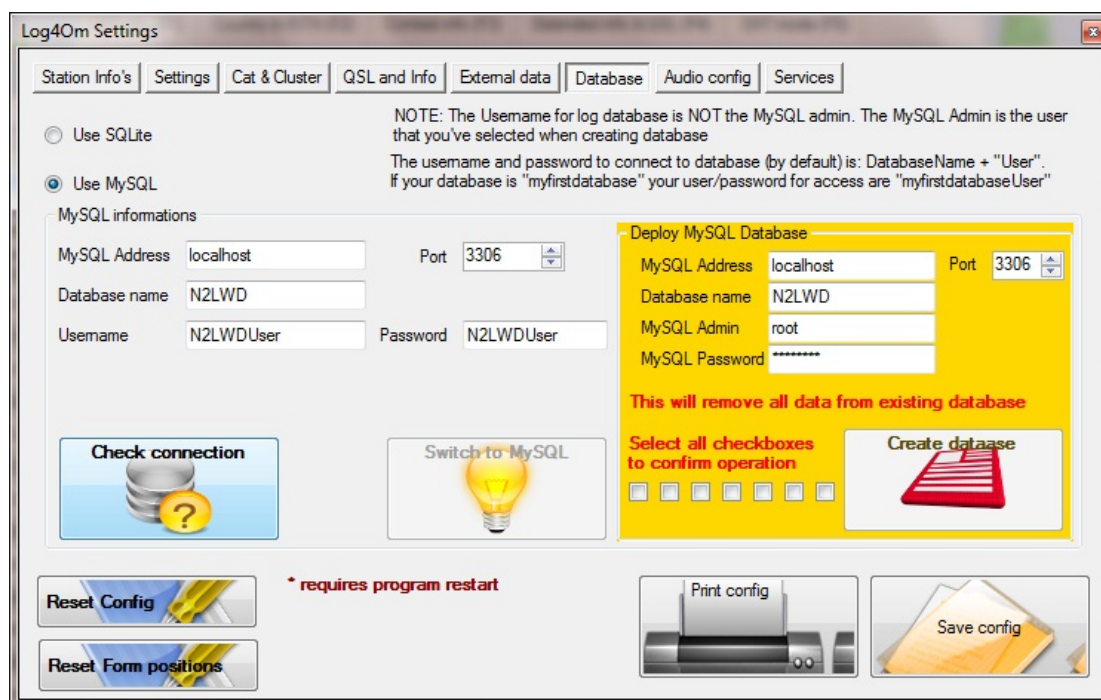
In the Gold/Yellow box to the right enter:

1. The name chosen for the database.
2. The MySQL Admin name. This should be 'root'.
3. The MySQL password (This is the password entered during the MySQL setup).
4. Tick all seven checkboxes.
5. Click the button 'Create Database'.

After a short pause this screen, confirming that the data base has been created, will appear.

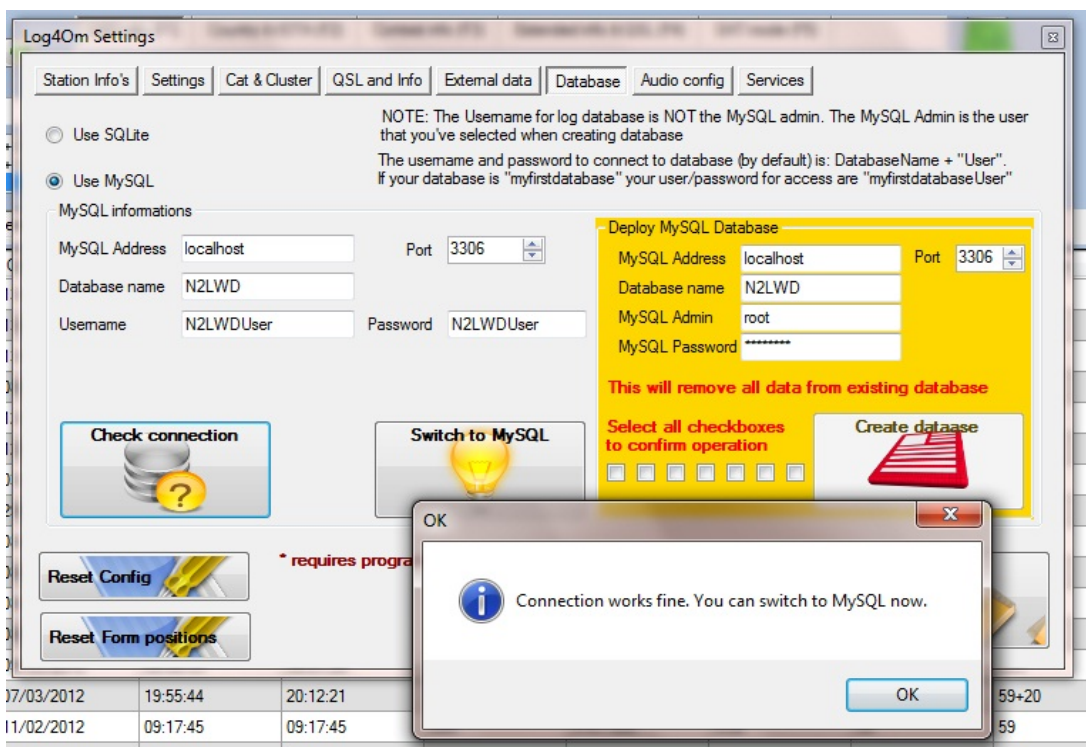


Click 'OK'

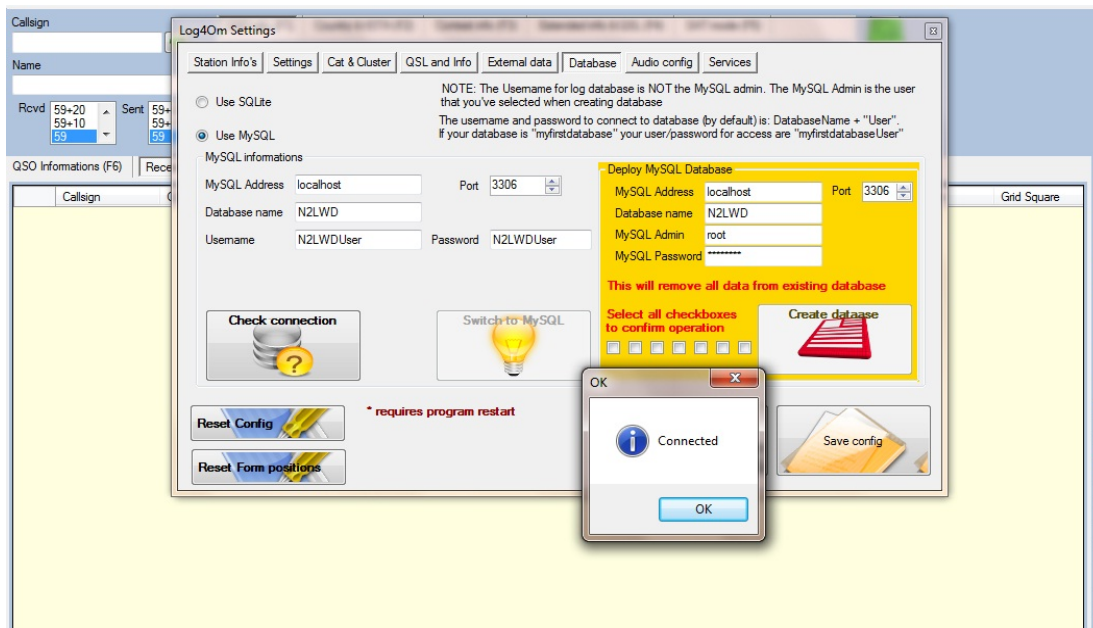


Click the 'Check connection' button.

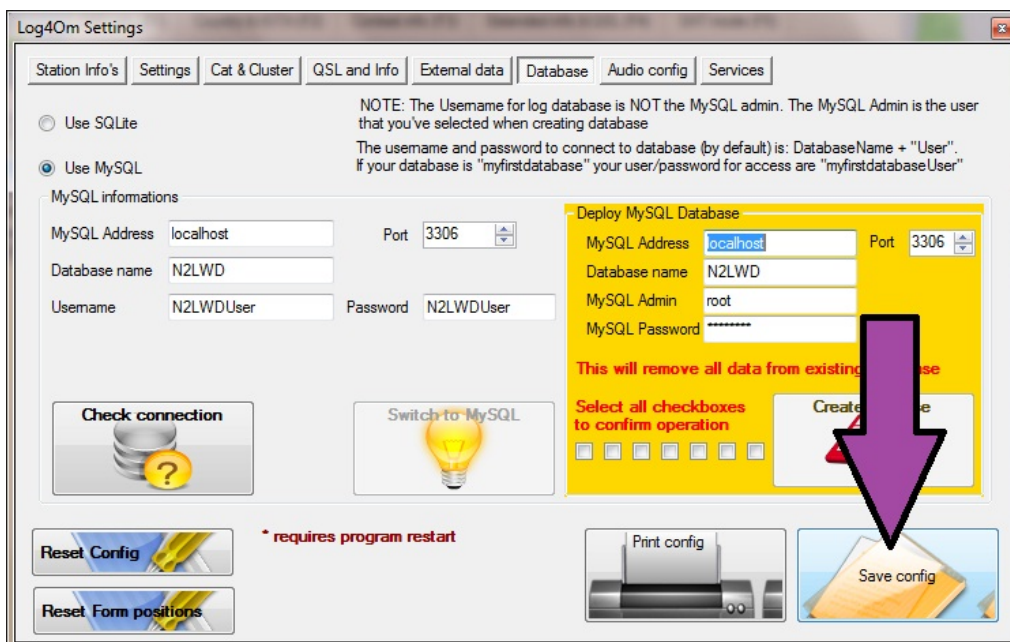




Click 'OK' and then the 'Switch to MySQL' button for confirmation that the connection has been successful (see below).



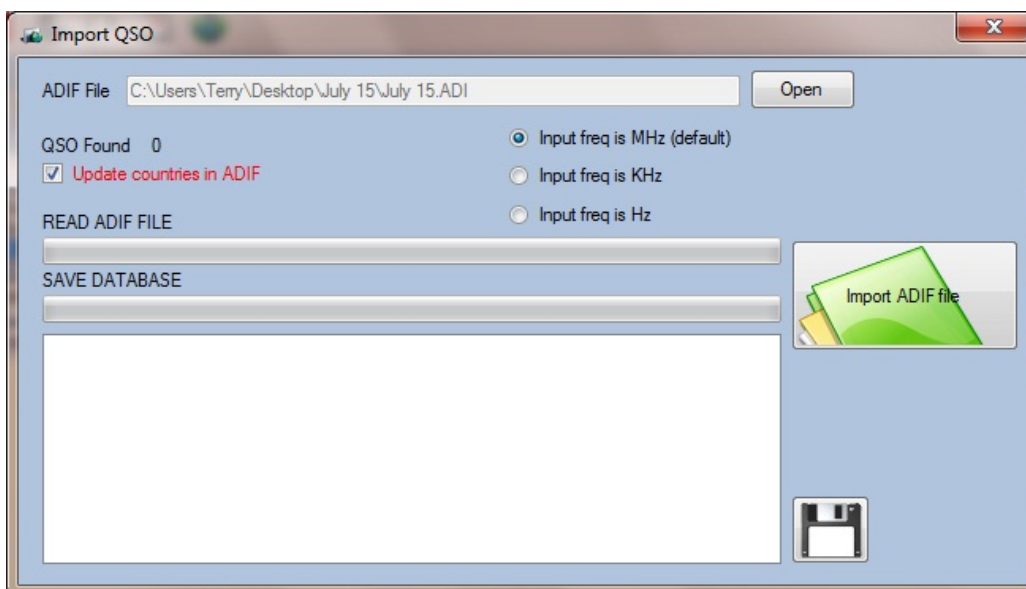
Click 'OK' and be sure to click the 'Save config' button.



## Importing an ADIF file into the new MySQL database

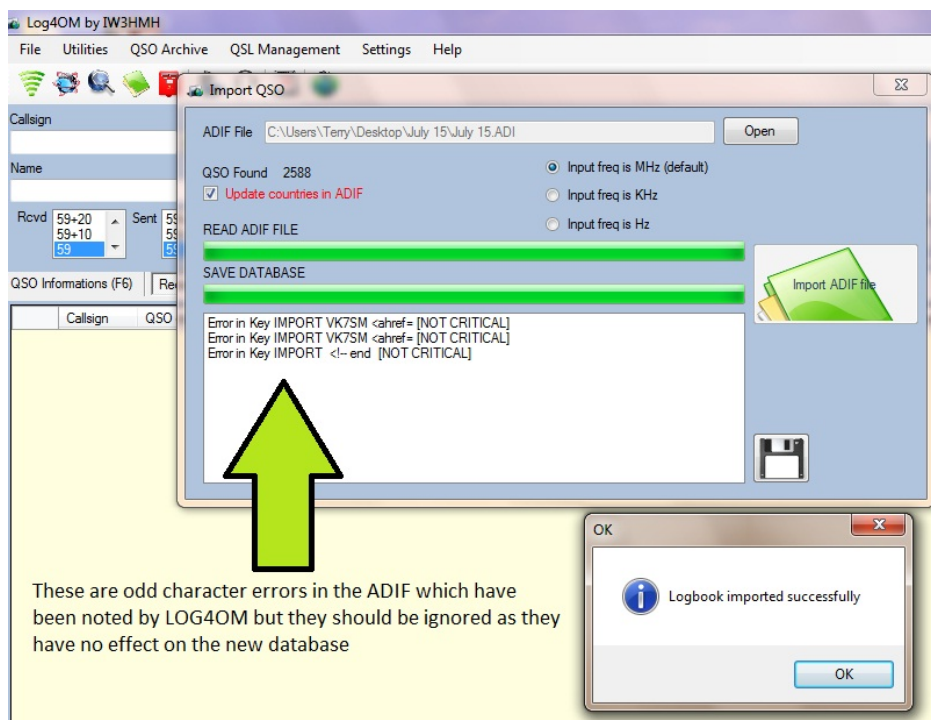
**IMPORTANT.** Before importing an ADIF ensure that the latest countries file has been downloaded from the 'Settings' menu.

In the Log4OM 'File' menu, select 'Import ADIF'



In the 'ADIF File' field (at the top of the 'Import QSO' window), select the ADIF to be imported. Tick/Check the 'Update countries in ADIF' check box.

Click on the Green 'Import ADIF file' button.



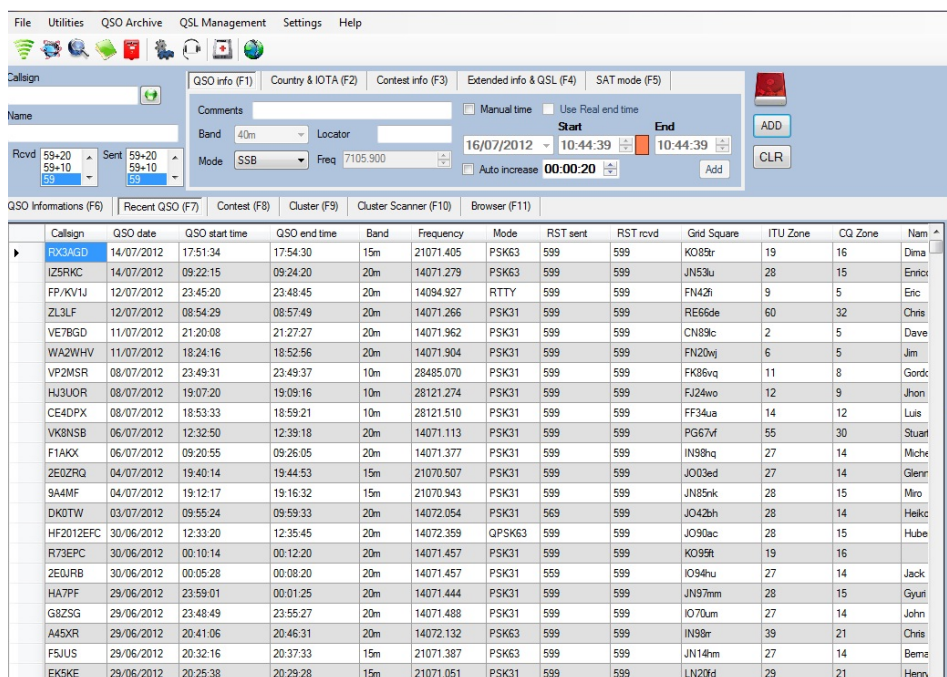
These are odd character errors in the ADIF which have been noted by LOG4OM but they should be ignored as they have no effect on the new database

If 'Error in Key' messages (as shown above) appear, but they are flagged as [NOT CRITICAL] they can be ignored. They indicate that LOG4OM has found and corrected some character errors in the ADIF.

Click 'OK'.

If required, click on the diskette button to print a list of any errors. Then close the import window.

After a few seconds the new database will appear in the 'Recent QSO's' window.



## MySQL Fast backup & restore

### Information provided by Alessandro Gorobey IW3RAB

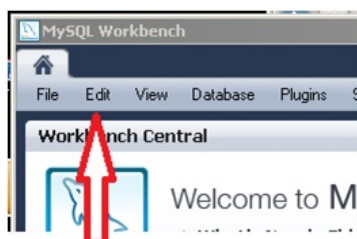
The MySQL database has a utility to export (Backup) and import (Restore) tables in the database called 'Manage import/export' included in the MySQL workbench program, unfortunately there is an issue with this function.

The function can also be used for other procedures including moving tables from one database to another.

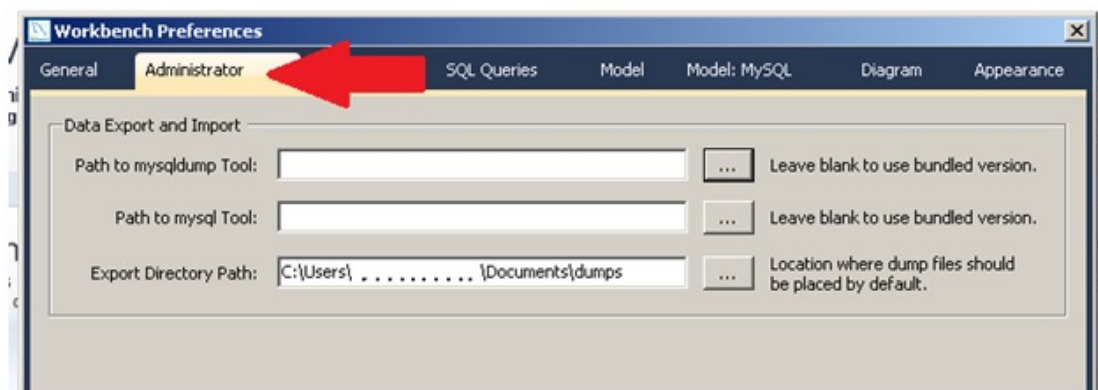
When installing MySQL on 64 bit operating systems the 'Manage import/export' facility can cause errors, this is a known issue that is regularly reported on the internet.

Fortunately the problem is easily resolved as follows:

1. Open MySQL Workbench
2. Select 'Edit' and then 'Preferences'



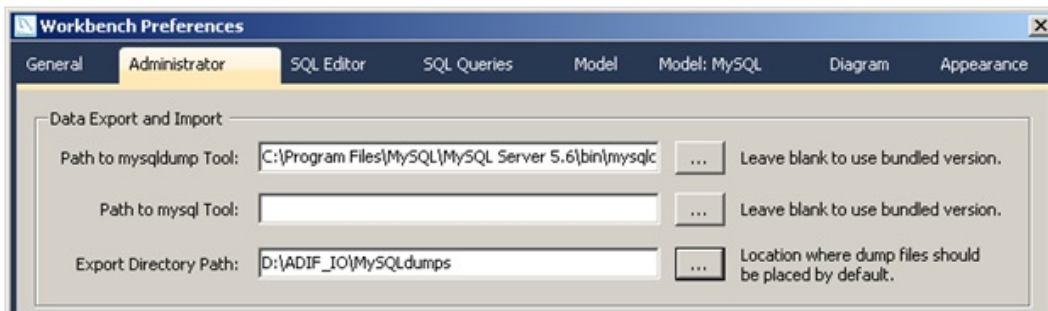
Select :  
 Edit  
 Preferences ...



The field 'Path to mysqldump Tool' will be empty which indicates the wrong version of the program has been used.

Complete the path field by inserting the path to the mysql server.exe, which is located in the 64 bit directory, not the x86 directory.

The user can also optionally change the destination path to the dump directory, where dumps will be stored.



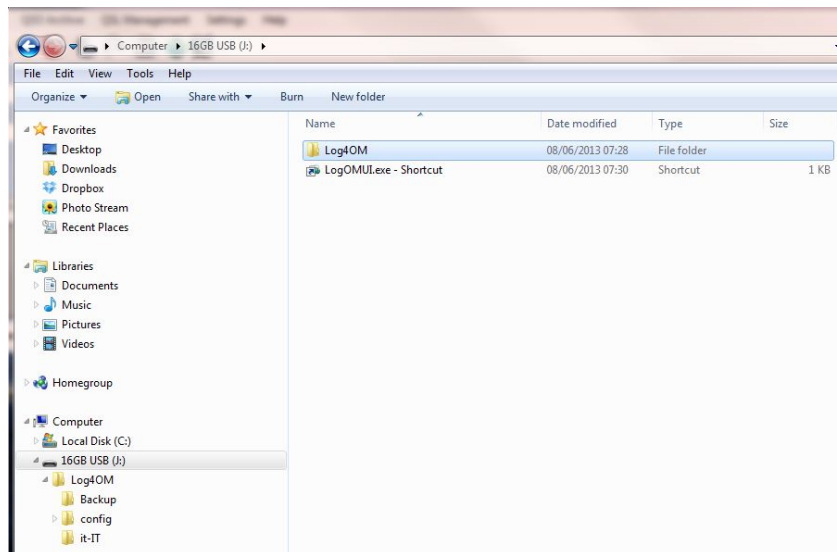
A full description of this function is outside the scope of this user guide, however a full explanation can be found in the MySQL manual and also on the Internet.

## Running Log4OM from a memory stick

The portable version of Log4OM can be run from a memory stick by extracting the downloaded portable version directly onto the memory stick.

It is suggested that for good housekeeping that a folder is provided on the memory stick called Log4OM and that all of the files are extracted to this folder.

Once extracted locate the file 'LogOMUI.exe' and create a shortcut to this file, when created move this shortcut to the root directory of the memory stick.



Start Log4OM by clicking the shortcut and complete the initial configuration of the program in the Log4OM 'Settings' menu as detailed in the user guide under the heading 'Initial setup of Log4OM'

### **Please Note.**

- To make the program truly portable **everything** must be stored on the memory stick.

*e.g.*

*The LOTW Trusted QSL program and the certificates if LOTW upload and download functions are to be undertaken from the memory stick.*

- The path to all files and folders inserted during the initial setup must be to the address of the memory stick including any new databases and backup folders created!

*e.g.*

*A. Any backup folder created must reside on the memory stick and the path would be similar to this  
J:\Log4OM\Backup*

*B. The sqlite database file must reside on the memory stick, the path would be similar to this:  
J:\Log4OM\G4POP.sqlite*

**Warning:**

When moving the memory stick from one computer to another the memory stick drive address will change.

*e.g.*

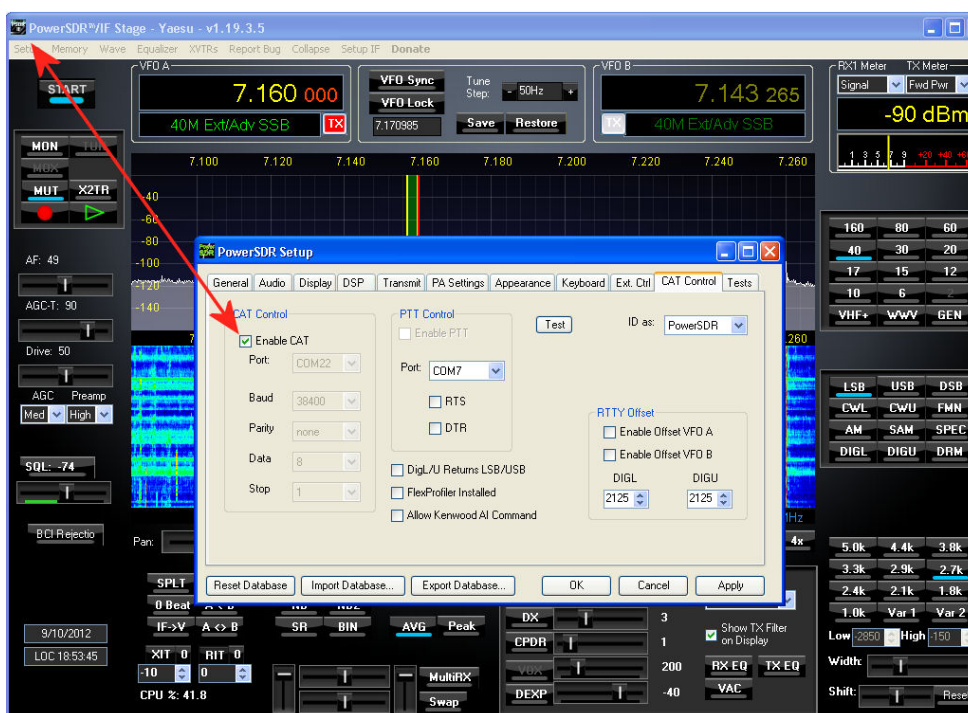
*One computer may assign the memory stick a drive letter of 'E' and another 'J' so  
E:\Log4OM\G4POP.sqlite may change to J:\Log4OM\G4POP.sqlite*

The user must change the drive letter accordingly for the program to function correctly every time the memory stick is used with a different computer.

## Flex Radio setup

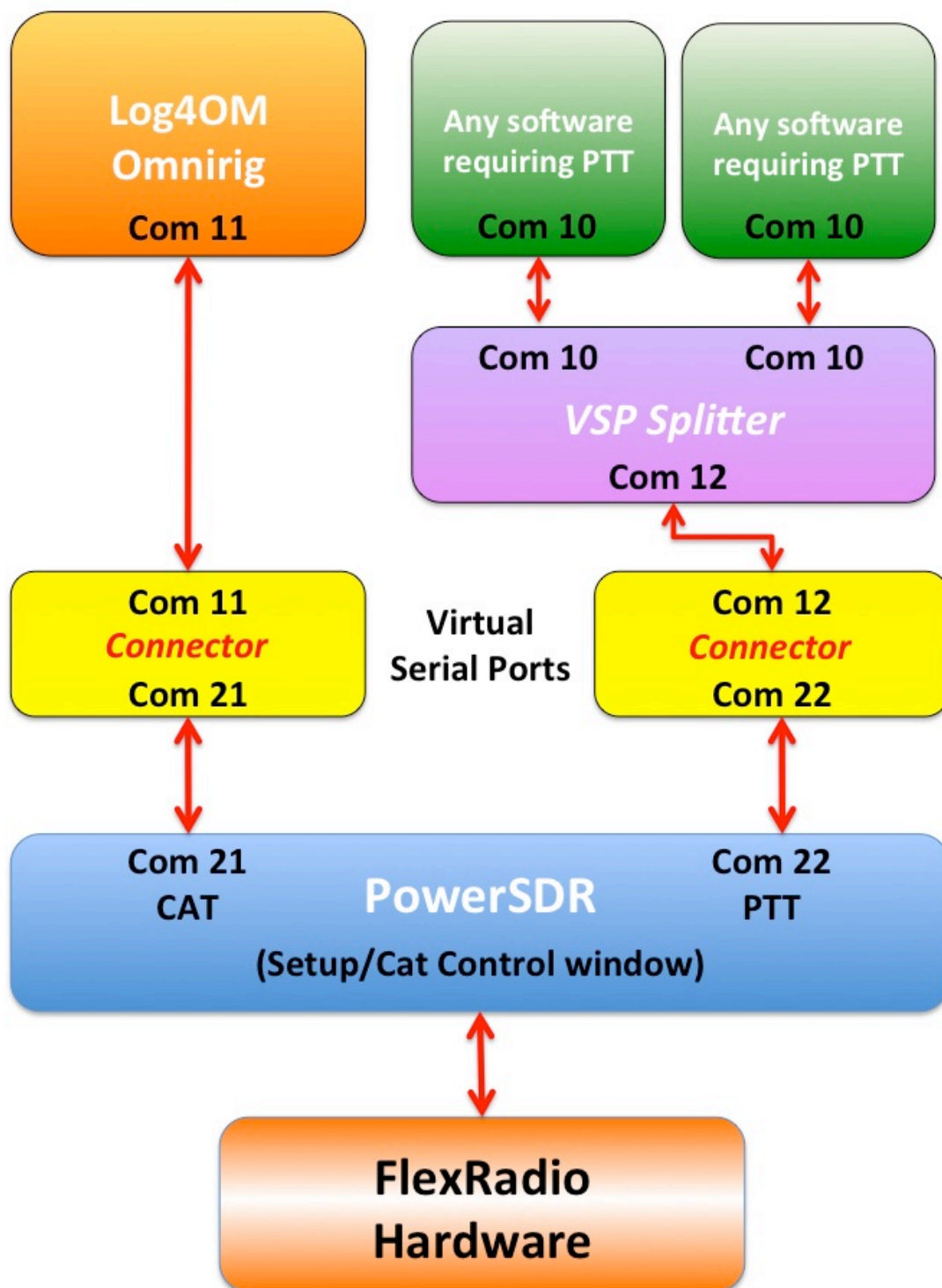
Written by Jim Steinmetz W1RET

1. There are many VSP programs e.g. com0com, Eterlogic & VSPE and all are free for Windows XP however for a Windows 7 64 bit version there is a charge.
2. Use Eterlogic or VSPE for PTT functions because they can be set-up as a splitter when PTT is being applied in FLDIGI and JT-65HF.
3. Do not use Hamlib, PowerSDR will only work with Omnirig.
4. The user can select any port – Do not use an existing port.
5. Keep the input/output VSP Port assignment numbers separated by 10. E.g. com11 connected to com21, com12 connected to com22.
6. The port settings are entered in the PowerSDR Setup/Cat control tab as shown below.



See the diagram below for the virtual serial port emulator setup





## Using PowerSDR/IF Stage with LOG4OM and other programs

### **Hardware**

Transceivers with a dedicated IF output similar to Yaesu FTDX 5000D or TS850

Yaesu transceivers fitted with the RF Space IF2000 module for specific use with RFSpace SDR receivers

LP-Pan Panadaptor or RF Space SDR IQ, IP, Net SDR

### **Software:**

Virtual Serial port emulators: VSPE by Eterlogic

SDR Consoles: PowerSDR/IF, Spectravue, CuteSDR, SDRDX, SDR-Radio

Logging program: Log4OM

CW Software: CW Skimmer, CWtype, DM780

Rotator Control: PstRotatorAz x 2.

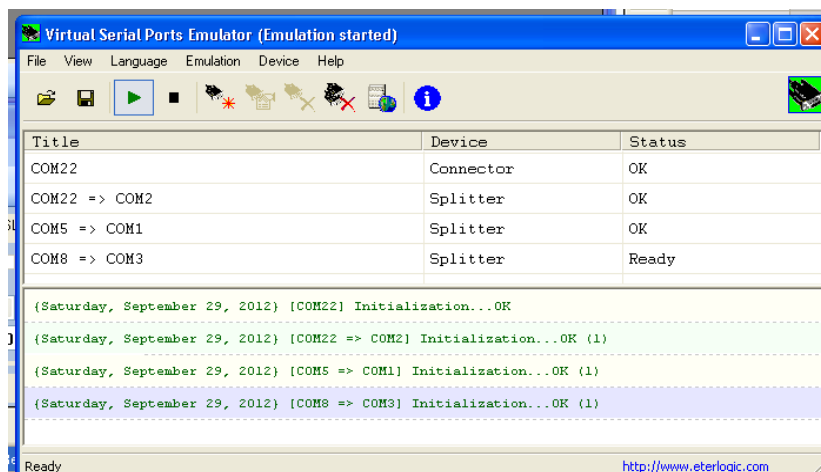
These instructions demonstrate how LP-Pan can connect to any radio that has a suitable IF output. The other hardware and software listed can be connected in a similar manner. For more information concerning LP-Pan and other radio connections, please refer to the LP-Pan site.

[www.tele3postnic.com/LP-PAN.html](http://www.tele3postnic.com/LP-PAN.html)

A multitude of programs that can create virtual serial ports are available. In this example VSPE from Eterlogic has been used to provide a splitter and connector to hardware COM port and make them available for up to 8 programs.

Start by creating Virtual ports, as per the screen shot below.

**(Do not create splitter COM8=>COM3 it is not needed for this purpose.)**

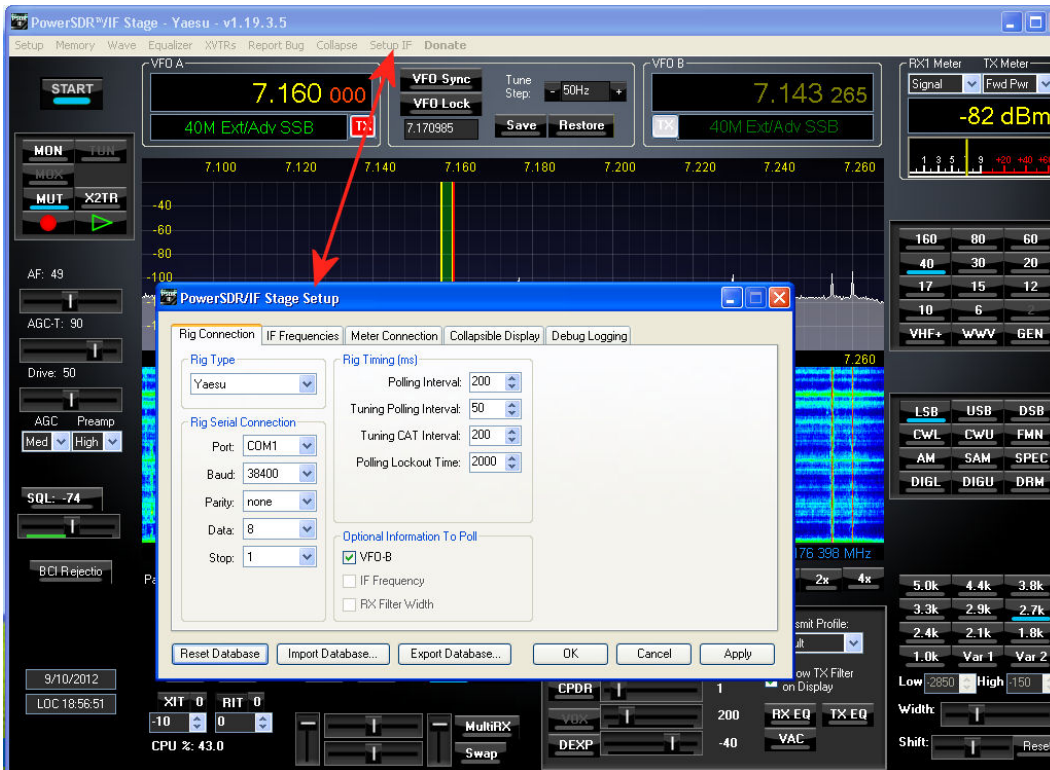


Once the Connector and Com ports splitters are in place, it is important to save them, otherwise the process will have to be repeated the next time the program is started.

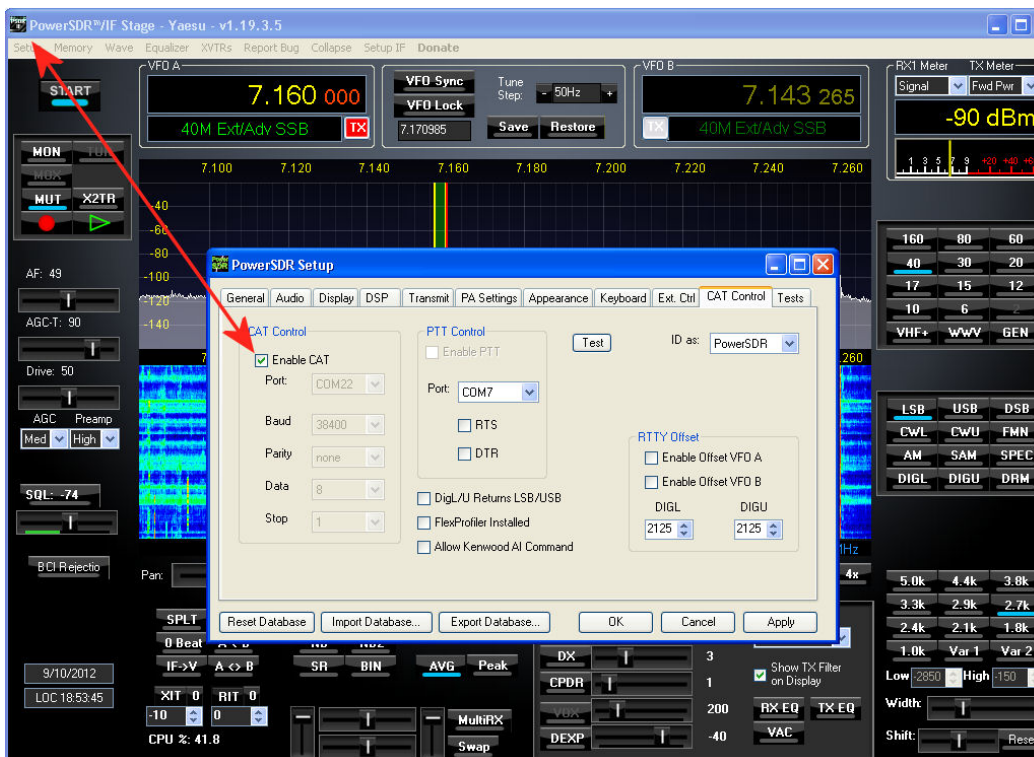
For convenience, VSPE can be loaded automatically upon start-up.

COM 5 is the hardware serial port connected to the transceiver, this is linked to VSP COM1. Programs that would normally connect to COM 5, will now connect to the VSP COM 1.

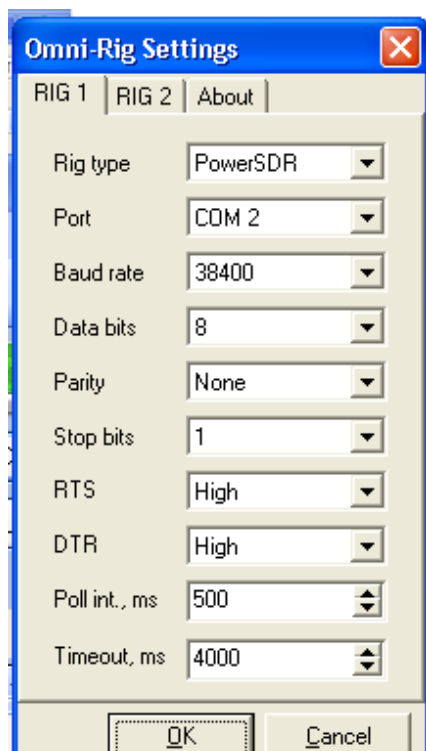
PowerSDR /IF connects to COM1. This connection is shown in the PowerSDR/IF Setup screen below.



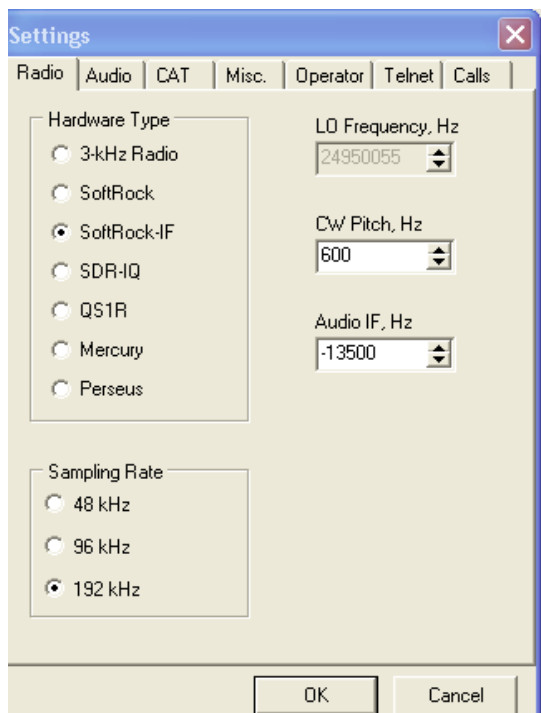
In PowerSDR/IF Setup, set and enable the CAT control. (See screen below) This is the connector 22 created in VSPE. (See screen shot entitled 'VSP Emulator')

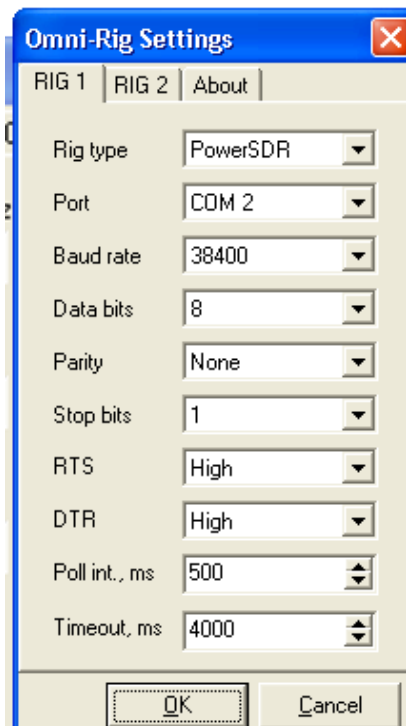


In Log4OM use Omni-Rig to connect to the VSP COM 2, which is one end of the splitter created in the VSPE to the connector Com22.



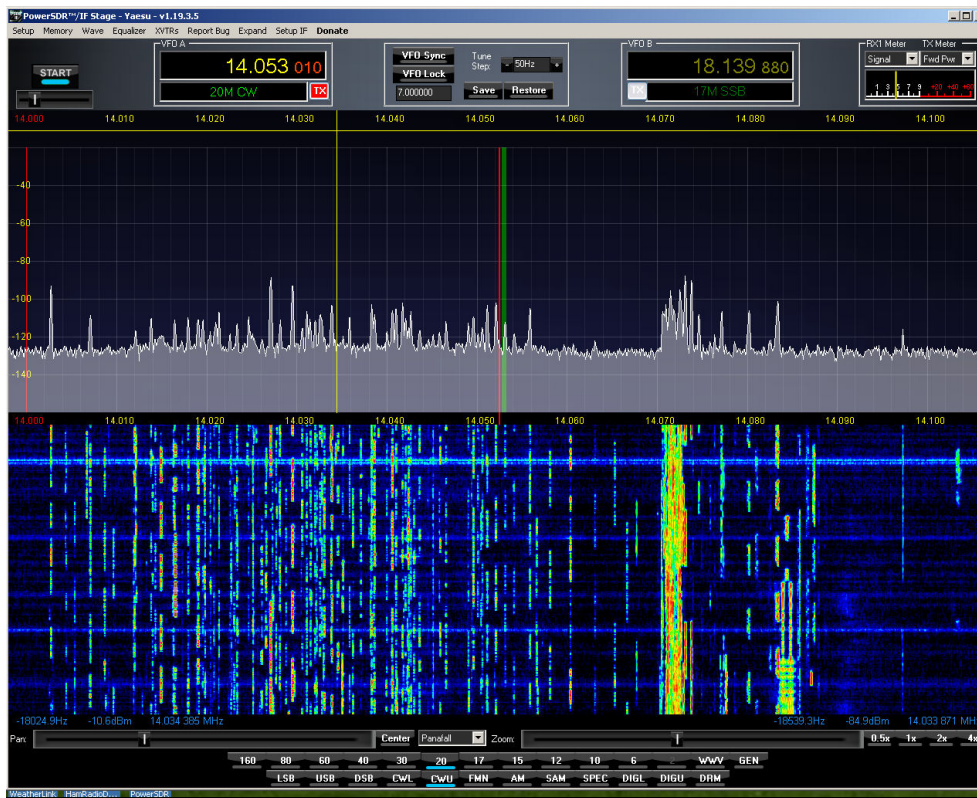
CWskimmer connects as per the following settings to give CWskimmer wideband receive capabilities.



**Radio**

The COM port and splitter numbers can be ignored, providing they match the data entered on the VSPE screen at the start.

This screen provides a widescreen panadapter display with 'point and click' facility similar to those in Flex radios. The wideband receive capability for CWskimmer allows the operator to view any station operating in split mode, whilst monitoring the DX stations transmit frequencies. It also allows the operator to view the stations calling the DX station that is operating in split mode.





## FlexRadio Signature Series (6500 and 6700) - Integration

By Don IK2EGL - [www.ik2egl.com](http://www.ik2egl.com)

The FLEXRADIO SIGNATURE SERIES has introduced a new architecture for connecting external devices and applications.

Physically the rig is connected with a Windows PC via an Ethernet cable and uses a tcp/ip network protocol to share all data with external applications.

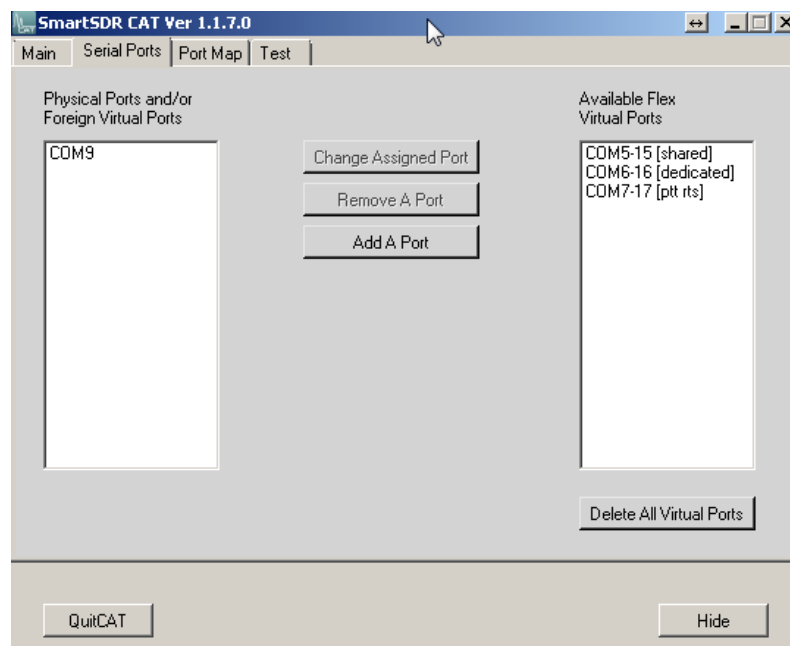
The main application is SMARTSDR, which provides full control of the Flex Transceiver. SMARTSDR shares the all of the audio channels with external applications too with the DAX protocol.

Other two applications can be used to share cat control:

- SMARTCAT (included in the SMARTSDR installation) SMARTCAT shares CAT protocol with the external applications, creating virtual com ports. SMARTCAT also creates virtual dedicated ports (bridge ports) to permit users to have two different applications communicate with each other over virtual com ports.
- DDUTILV3

Both applications natively connect with the FLEXRADIO DIGITAL SIGNATURE so the user does not need to use external com virtual port to make the integration.

Many user applications can connect to the Flexradio Signature at the same time because the Flexradio acts as ham communication server.



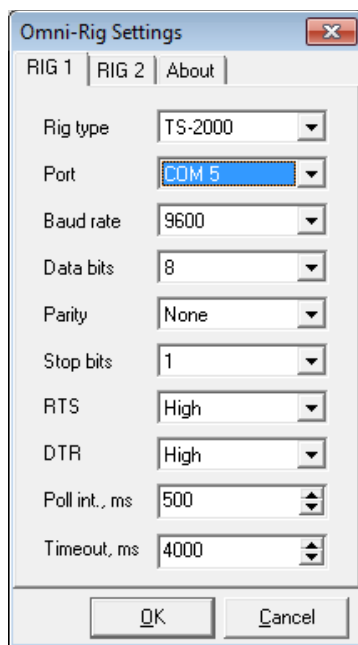


The port types that can be created with SMARTCAT are:

- A) Shared ports: used to share cat protocol: creates two ports, the lower is available for the user (com5), the upper one is dedicated to flex itself (com15);
- B) PTT port: used to share PTT protocol: creates two ports, the lower is available for the user (com7), the upper one is dedicated to flex itself (com17);
- C) Dedicated ports: used to create two virtual ports for external applications to connect each other (com6 and com 16)

LOG4OM is a user application and can be connected using SMARTSDR cat services.

LOG4OM cat connection has been enabled by OMNIRIG and, in the OMNIRIG configuration panel, select a **SMARTCAT DEDICATED com port** (com5) and selects the TS2000 rig type. Com 5 is the dedicated com port created in the SMARTCAT application.



That is all that is required to make LOG4OM communicate with flex signature.

For the DDUTIL V3 please refer to k5fr web page

([http://k5fr.com/DDUtilV3wiki/index.php?title=Main\\_Page](http://k5fr.com/DDUtilV3wiki/index.php?title=Main_Page) )

Please refer to the flex community for any possible support

(<https://community.flexradio.com/flexradio>) and all flexradio documents are available at the official site (<http://www.flex-radio.com/> ).

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WWW: <http://www.pisto.it>

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=====

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