LOG4OM

Amateur Radio Software

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IW3HMH

User Guide

By

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Contents

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 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
- 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 FLdigi 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/

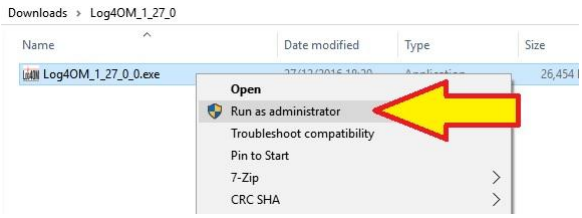
Getting Started

Installing Log4OM

Log4OM must be 'RUN AS AN ADMINISTRATOR', if it is not installed as such then some functions will not work!

First ensure that all other programs are closed (Not running)

To 'RUN' as an administrator first unzip the download file and then right mouse click on the install icon and select 'Run as an administrator' then follow the prompts.



When updating to a new version of Log4OM ensure that Log4om is closed and that all other programs are closed - It is not necessary to uninstall the old version but it is always wise to make a backup before updating.

Update by installing using 'Run as an administrator' as detailed above

Initial Setup of Log4OM:

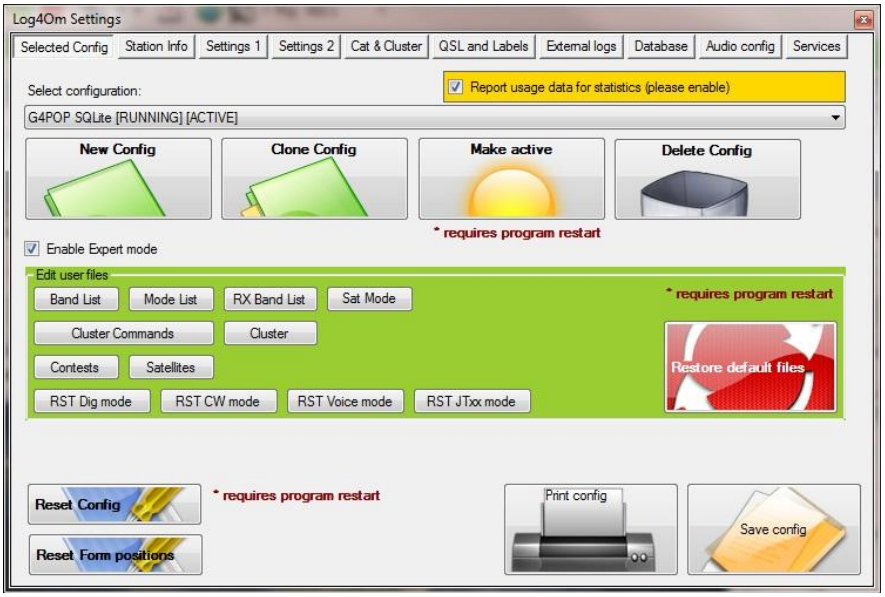
Initial setup steps

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 LOGBBOK”

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

Selected Config

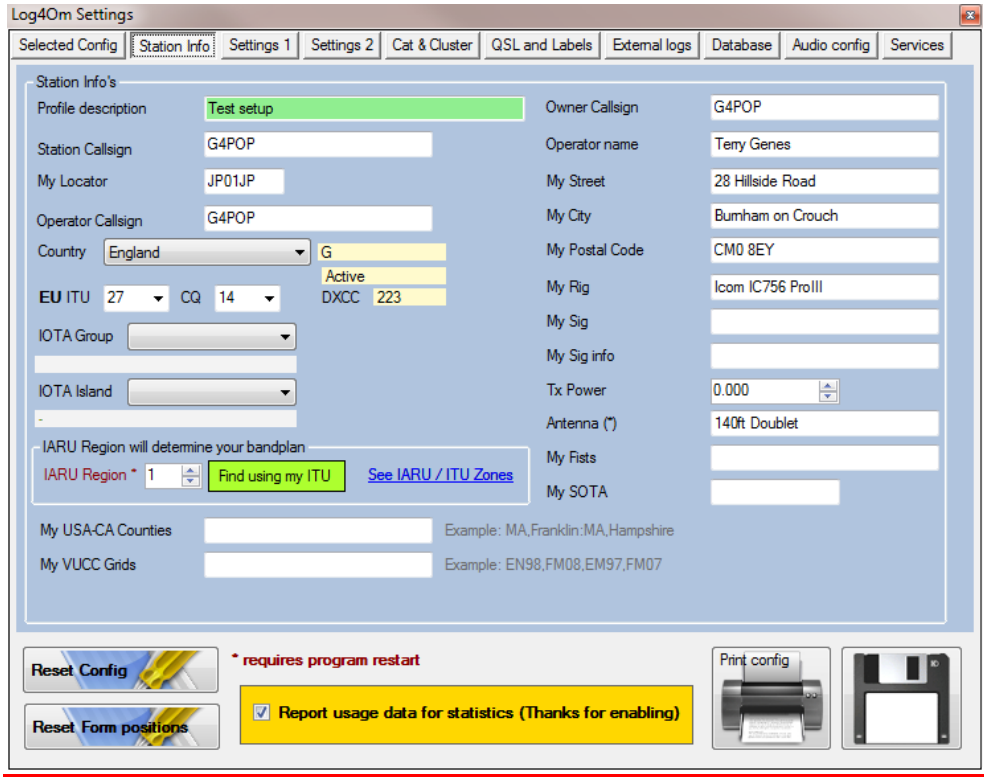
After installing the program, launch the program. The first screen will be the settings screen. Click on the ‘ Selected Config’ tab and ensure that the information required for each tab is complete, in order for the program to operate and maintain the data correctly.



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.



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)

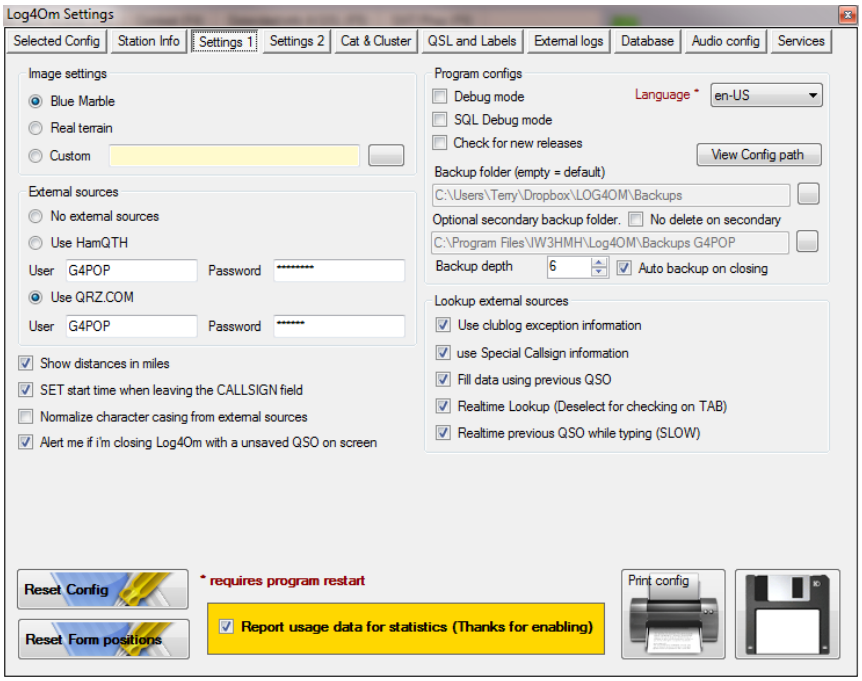
A possible scenario using the above field names and example callsign's.

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.



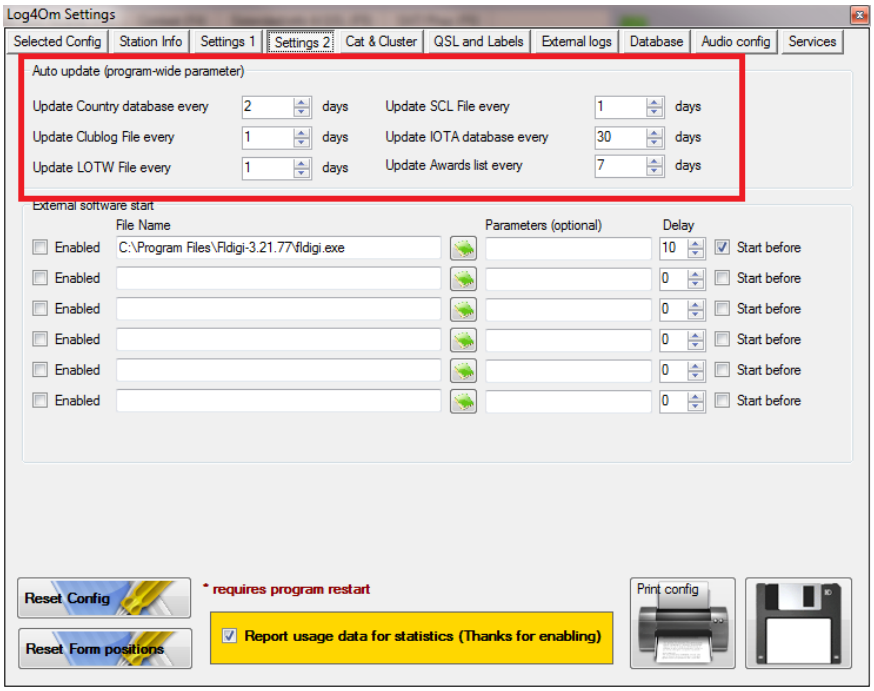
When searching for more information about a call sign, select the external and internal data sources to use, by checking the appropriate boxes in the 'Lookup External Sources' area of the services screen.

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

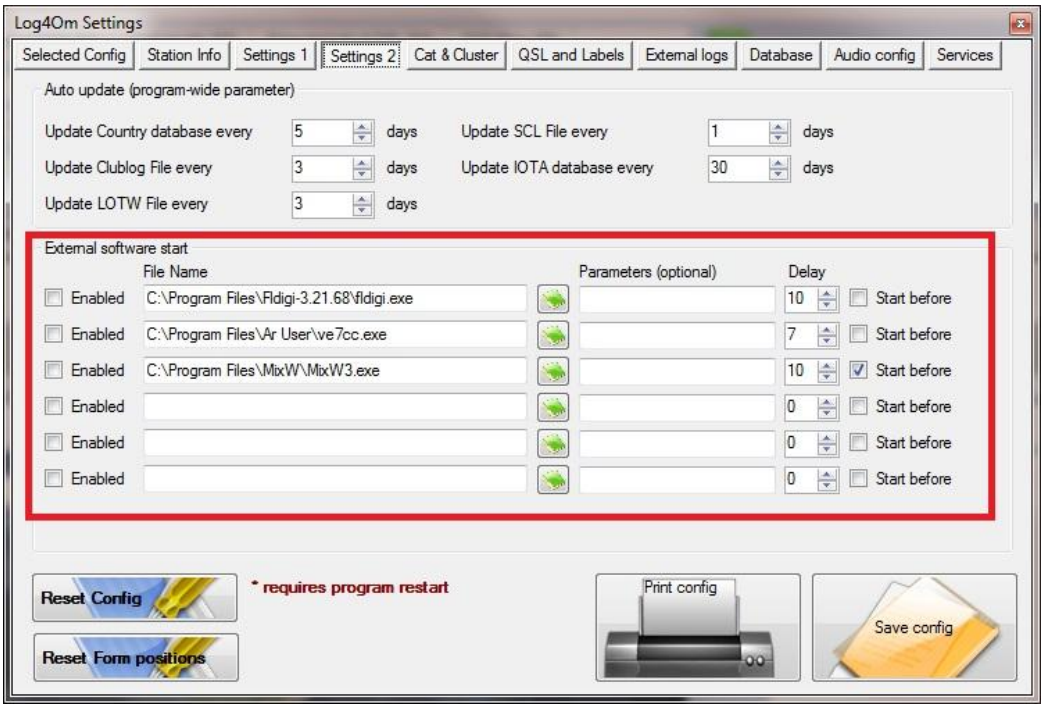
The frequency of automatic updates can be set in the 'Settings 2' tab



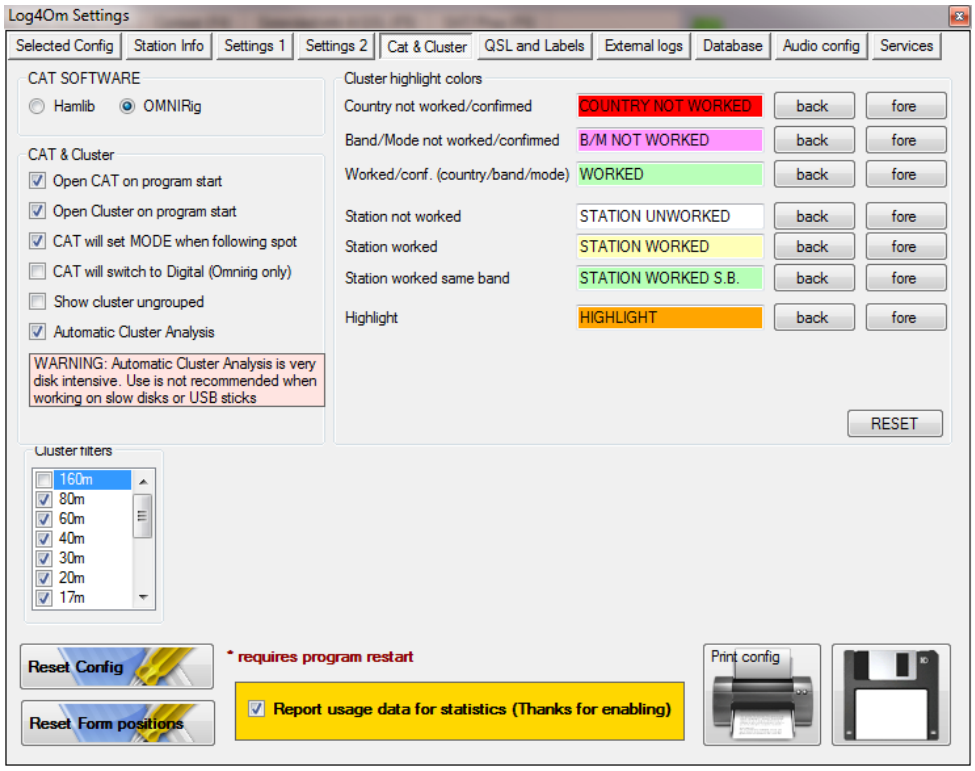
Automatically Starting External Software

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



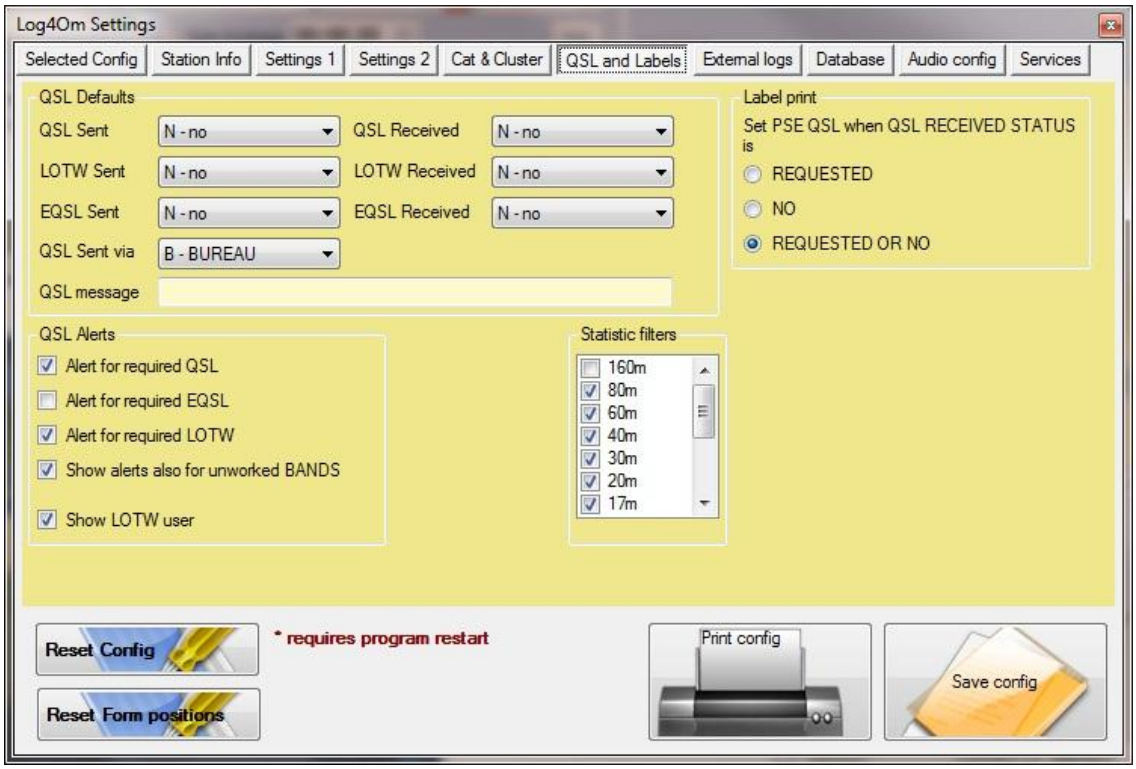
If rig connection is desired, select, in the CAT SOFTWARE section, either Hamlib or Omnirig.

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

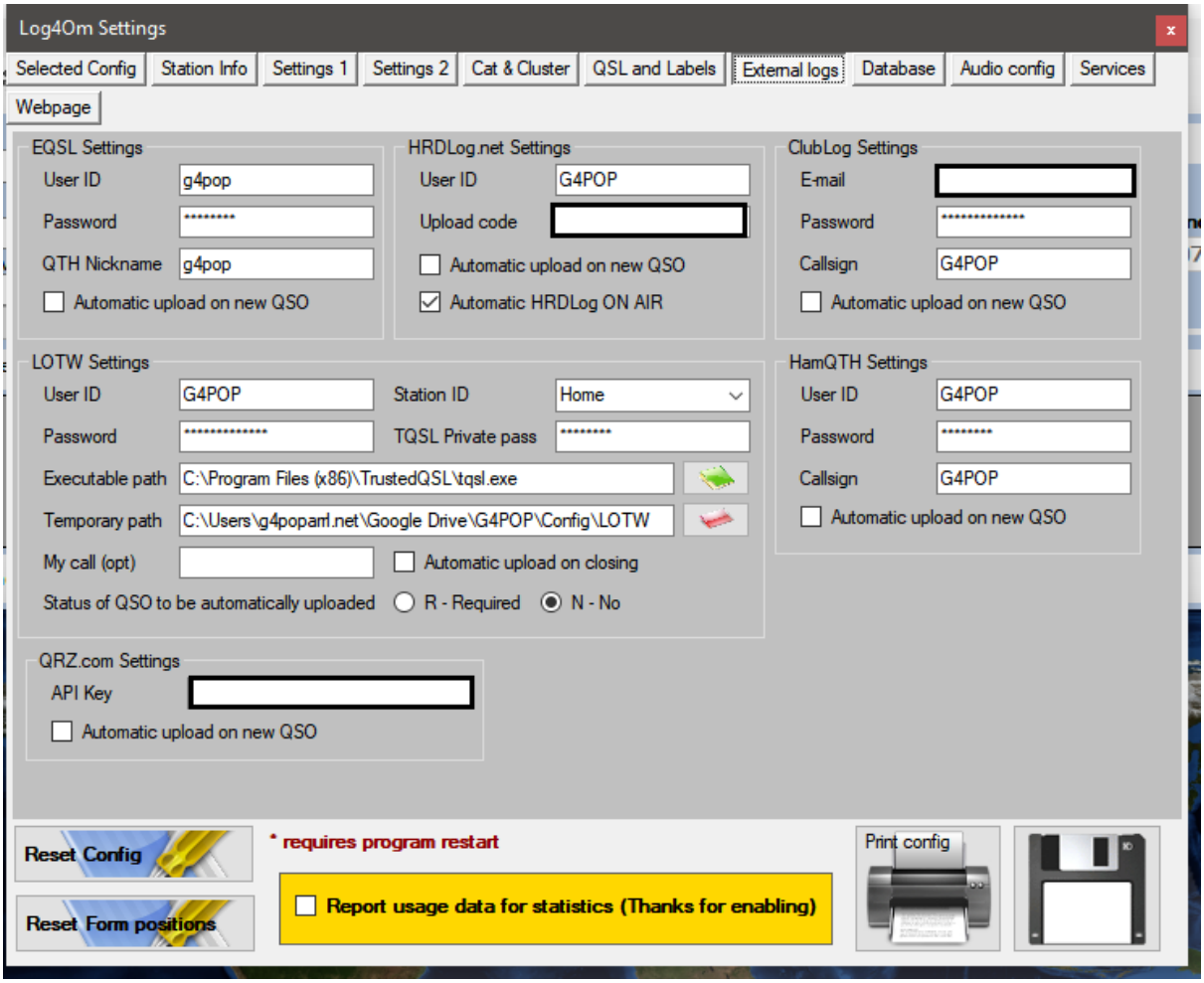


Enter the desired defaults for each QSL type.

Select the desired QSL alerts.

Deselect any unwanted bands from the Cluster Filters.

External Logs



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.

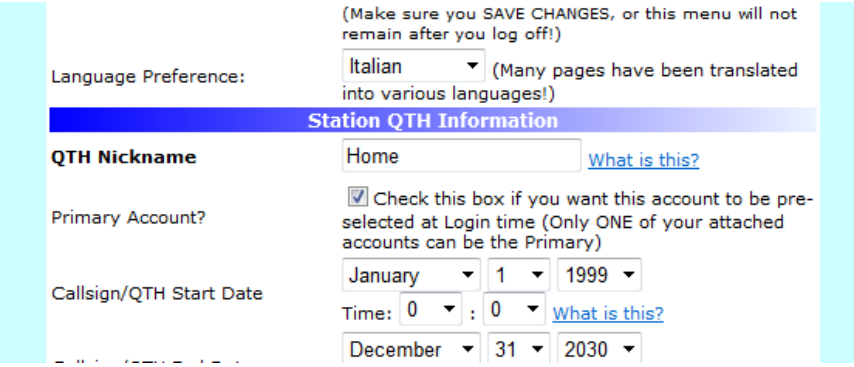
NOTE
THE USER MUST HAVE A PAID SUBSCRIPTION TO QRZ FOR THE API KEY UPLOAD TO WORK - 'HAM MEMBERS' OF QRZ CANNOT USE THIS FACILITY

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.

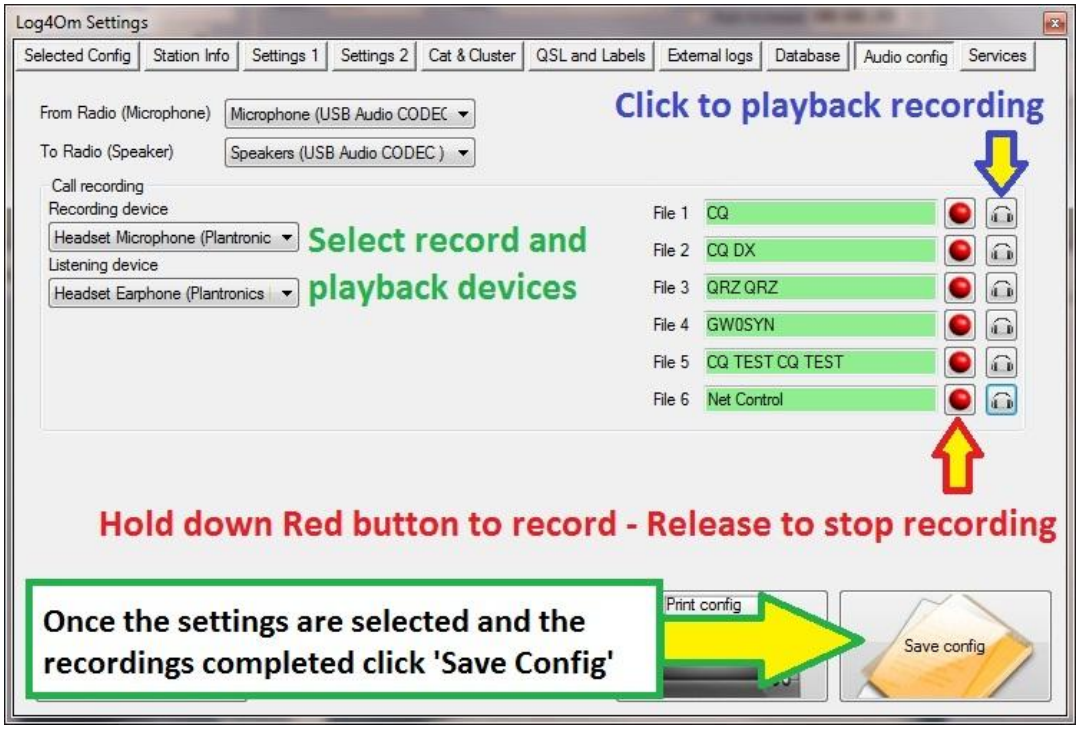
In the illustration below it is 'Home' enter the same value into the Log4OM eQSL Settings field.



Voice Keyer

Log4OM provides a voice keyer facility with six recordable memories.

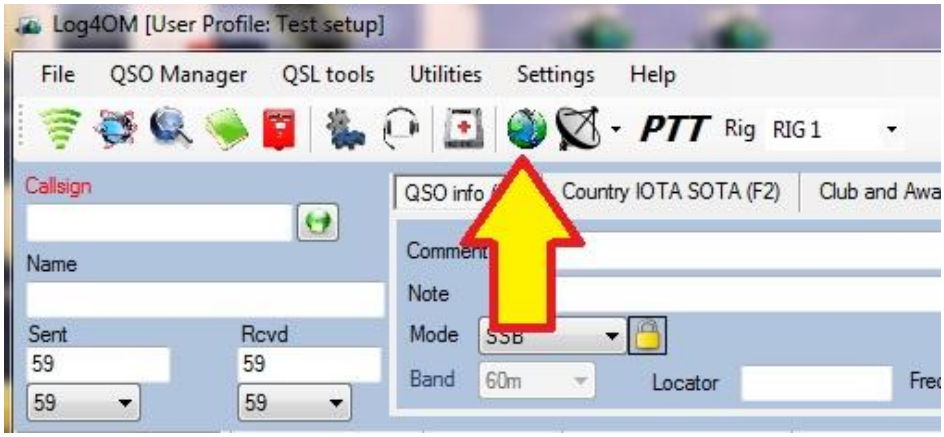
To set up the voice keyer and record voice keyer messages open the Log4OM settings window and select the 'Audio Config' tab.



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



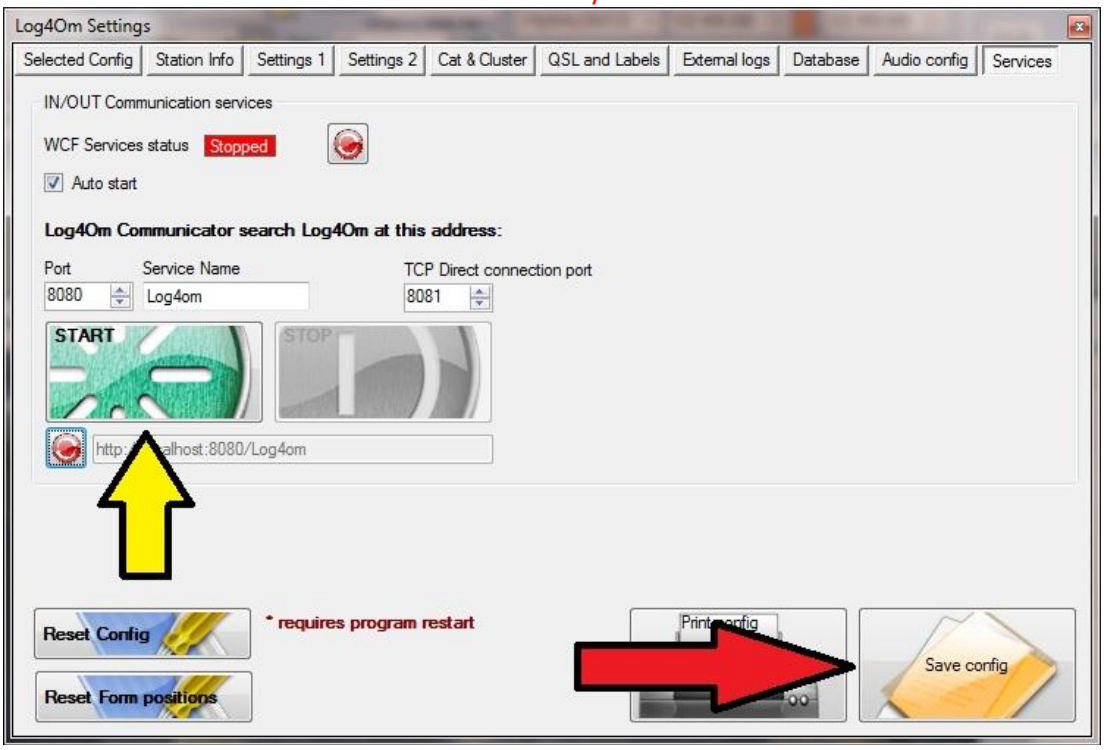
Click the button indicated above to open the voice keyer controls, these controls are detailed below

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 install Log4OM using the 'Run as an administrator' choice during installation 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.

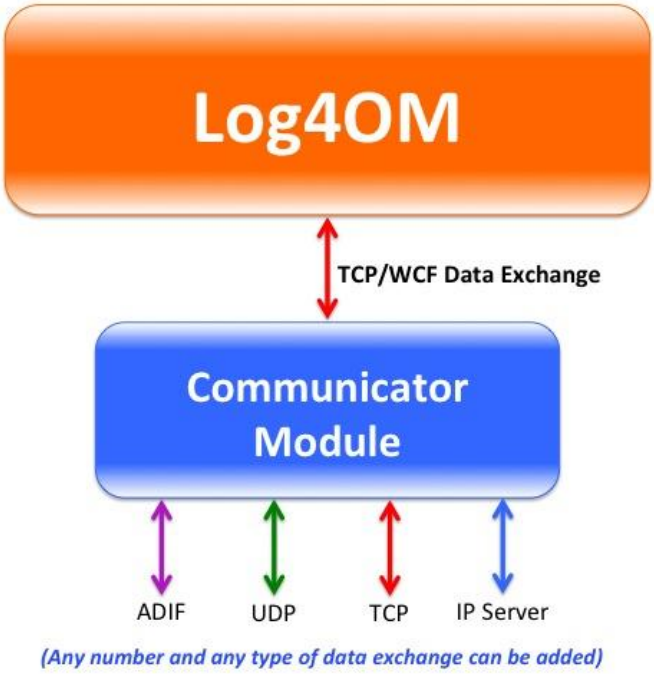
Check the Auto Start box if the Communicator will be required every time Log4OM is started.

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 FlDigi, 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

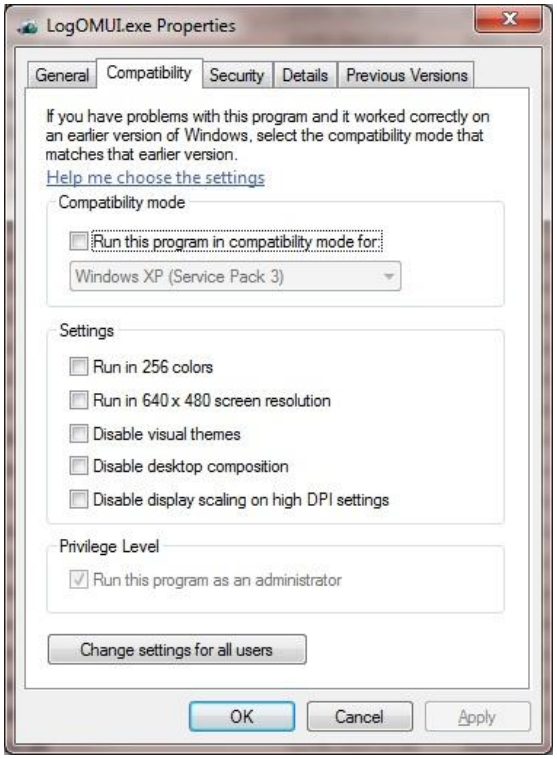
If it is not running it is because Log4OM is not running with administrator privileges.

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

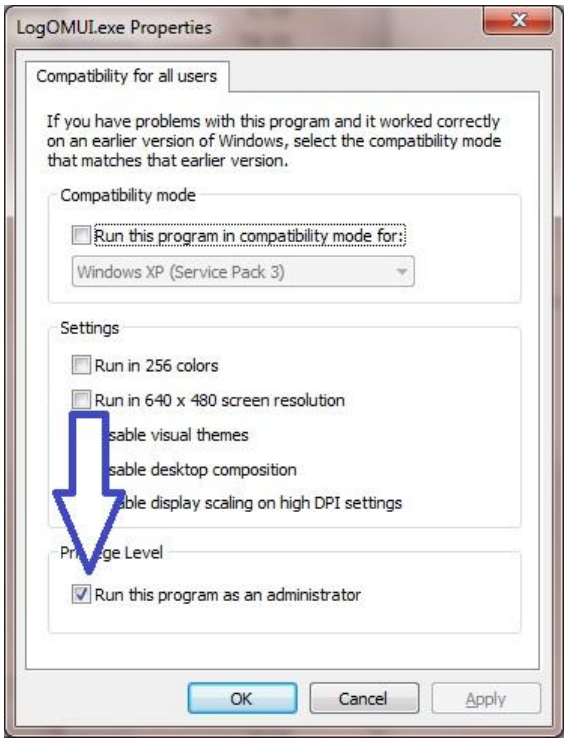
bit or at C:\Program FilesX86\IW3HMH\Log4OM for Windows 7 64 bit

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.

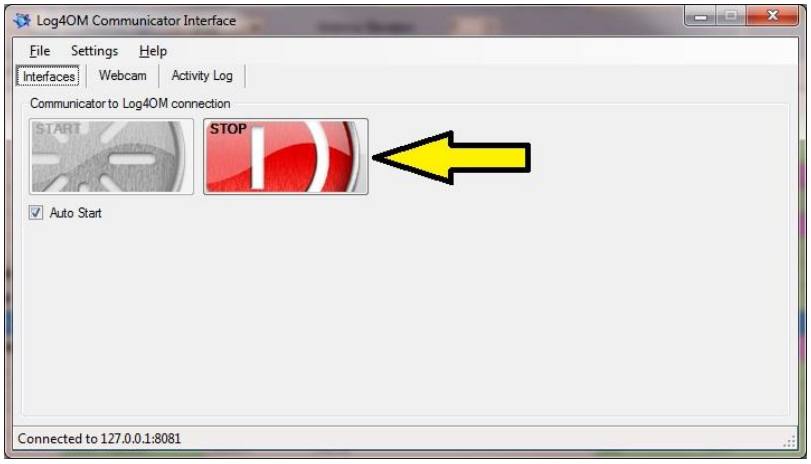


Click 'Apply' and then OK to close this window.

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.

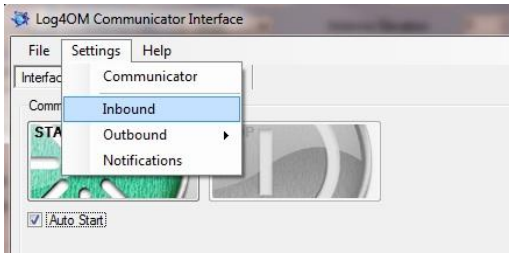
Setting up Communicator



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

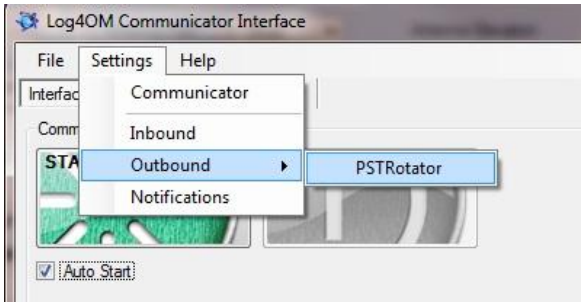
- Check the 'UDP Connection' check box.
- Insert the Port number e.g. Port 2236 for incoming data from DM780.

ADIF Polling

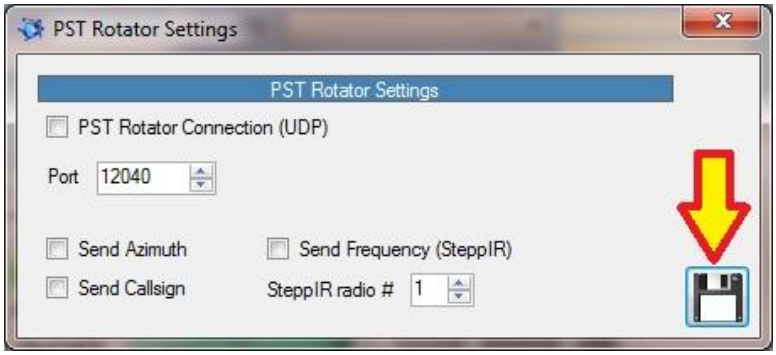
ADIF Polling allows Log4OM to monitor any ADIF file for changes and add any changes found to the Log4OM logbook.

- 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.

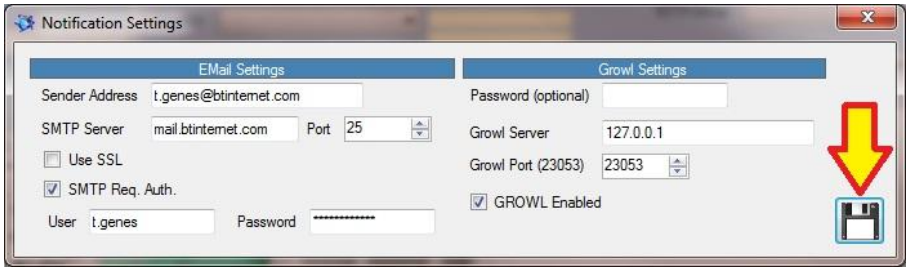
Webcam

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.

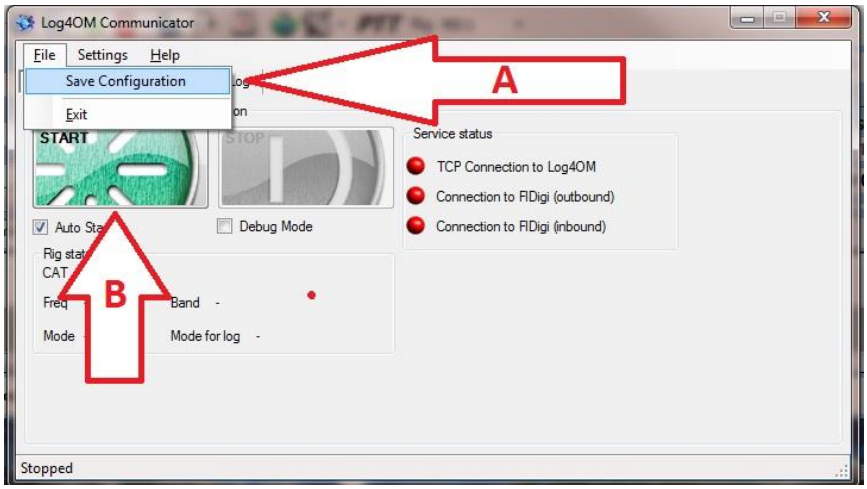
Notifications – Alerts.

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.

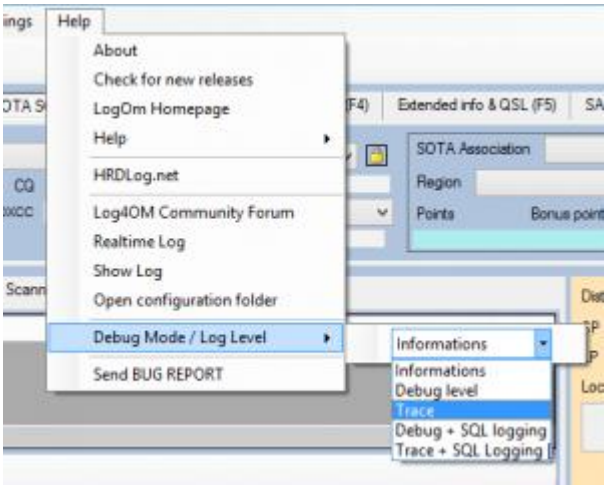


- A - Save the configuration
- B - Restart the Communicator
- **Minimize** the Communicator window – **Do not close it!**

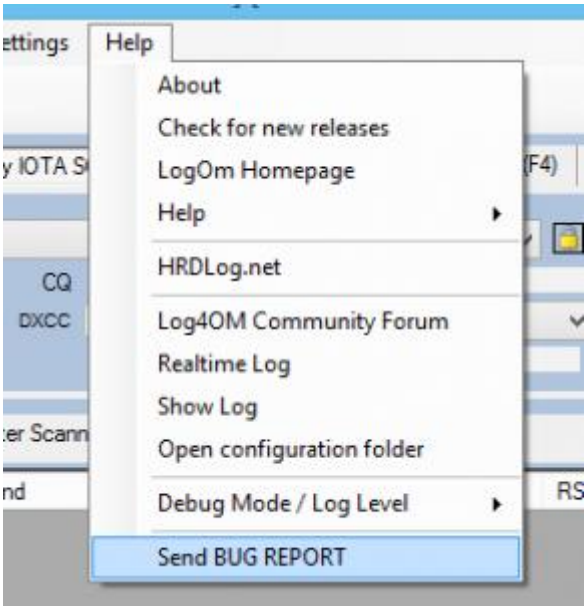
How to generate a support request

How to prepare log file for support review. Please do this only when asked for the log file package:

- Enable an higher log level. Usually errors are found by "trace mode" information that is not usually saved in the program log file to avoid unnecessary size of the file itself. The support team will ask you for the log level require. Debug is usually enough, but sometime we need an higher level of trace.



- REPRODUCE THE ISSUE. - The log will save the events for the current day only, it is removed daily, so an issue that happened yesterday will not be available in the log today.
- Take note of the time of day (UTC) when the issue happens. The log will usually produce thousands of lines, and this could help us identify the issue.
- Open the help menu an select SEND BUG report, please check the box "include ADIF backup", answer all questions listed as fully as possible, then click on "prepare support request".



- **Send the ZIP file** to the provided email address.

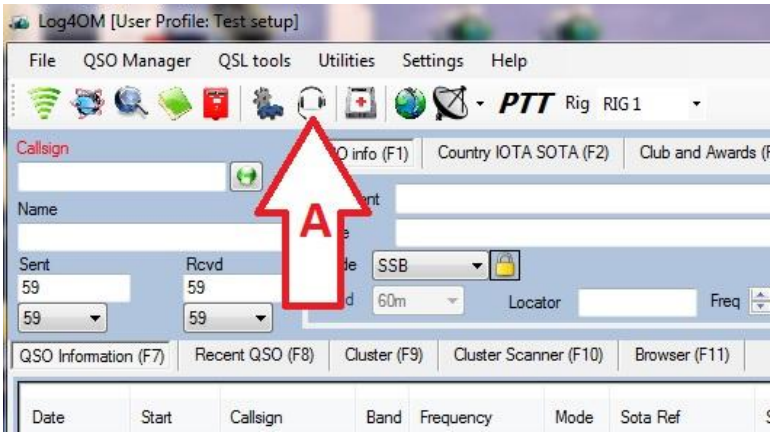
Please note: To debug remote calls and other things, the log will also store web URL and other information related to how the software works. Usually that information is safely stored on your PC, but you should be advised that we can see some information (password for online services like QRZ/HAMQTH or similar) from your log. That information, if needed, will be used to reproduce the issue and provide a better support, and will be deleted and never disclosed when we close the incident request.

If you feel un-comfortable about the above you can send a log extract purged of that non relevant information (it's a text file) editing the log file(s) (log4om and communicator) contained in the support request.

Log files are stored in your pc roaming folder - Help/open configuration folder

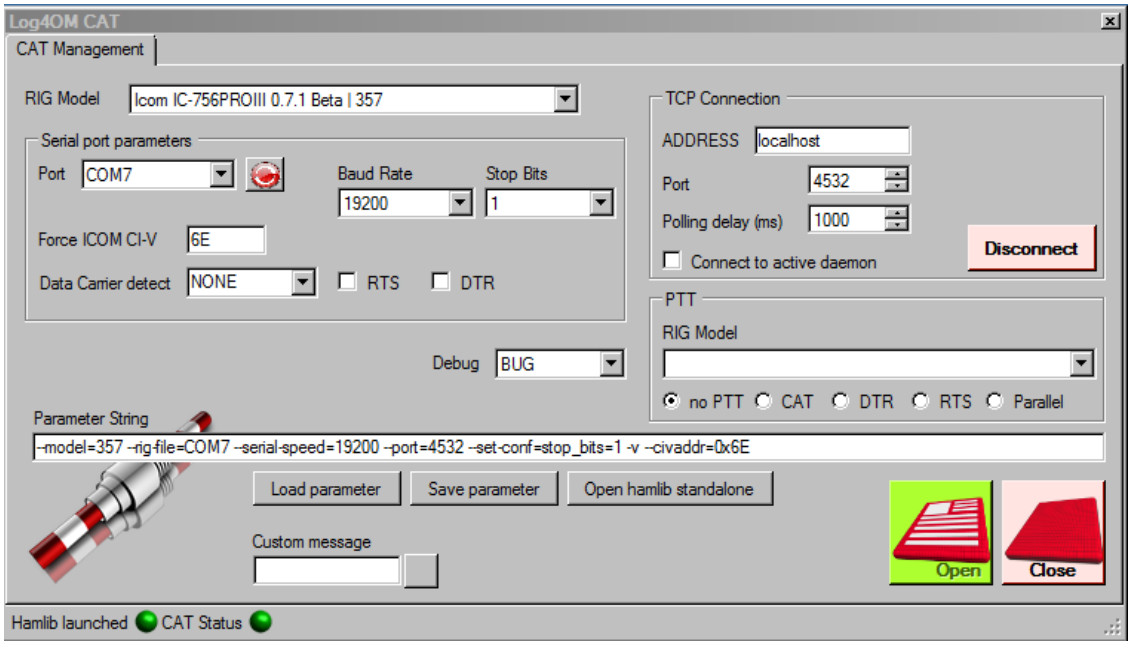
Radio connection

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:

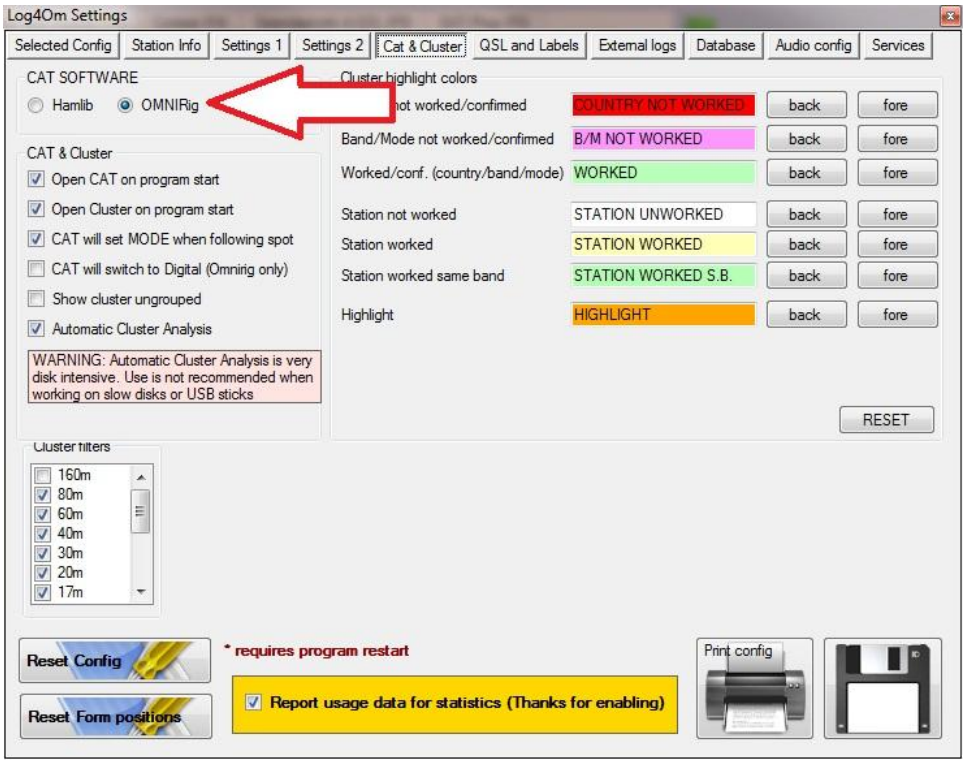
Hamlib control:



OmniRig control:

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

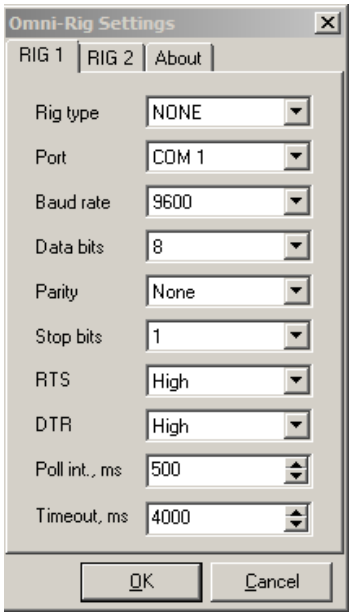
In the Options (Settings) window go to the 'CAT & Cluster' tab and select the Omnirig option.



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

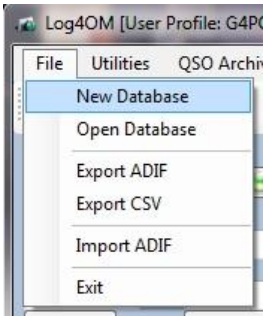
When using Omnirig it is possible to switch between two different radios using the Rig 1 & Rig 2 selection on the toolbar as shown below. Basic SO2R operation is therefore possible using dual interfaces.

Starting a New logbook!

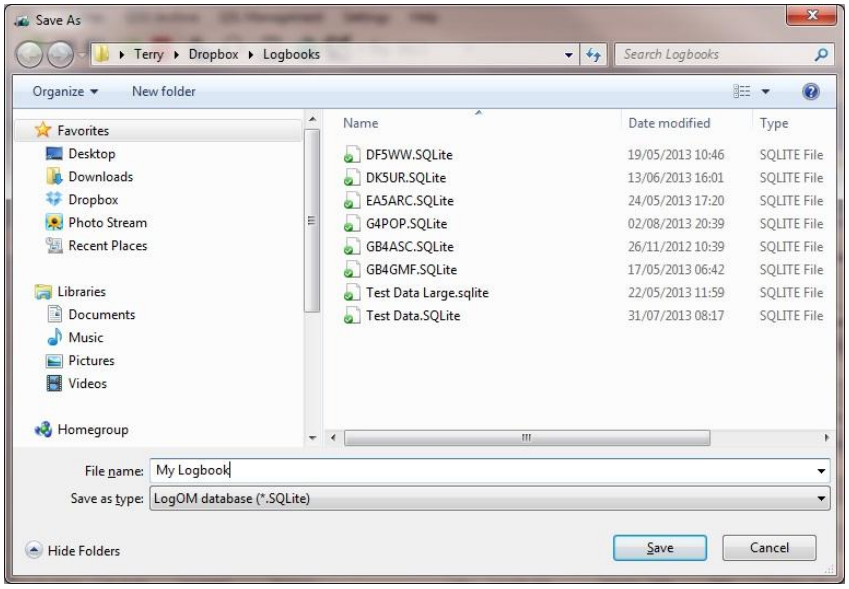
New Database

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.



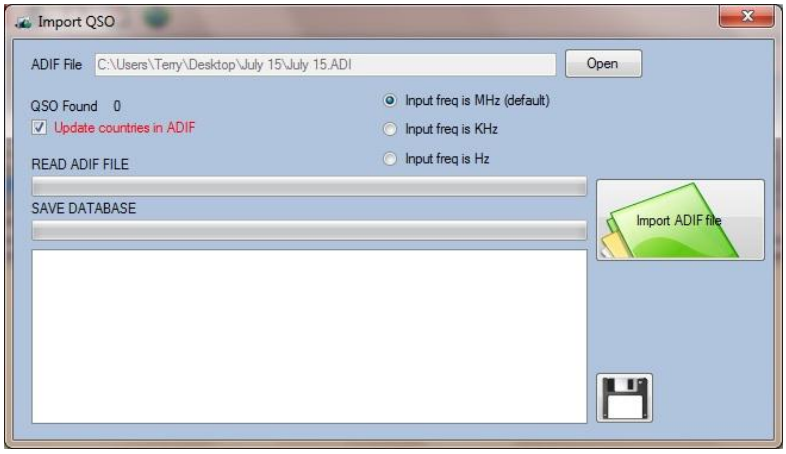
3. Click ‘Save’

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

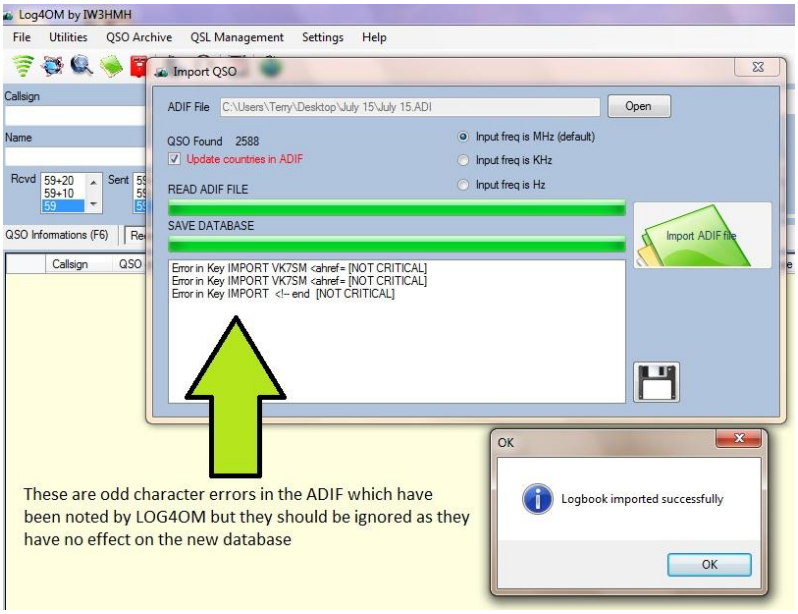
Importing an ADIF file

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.

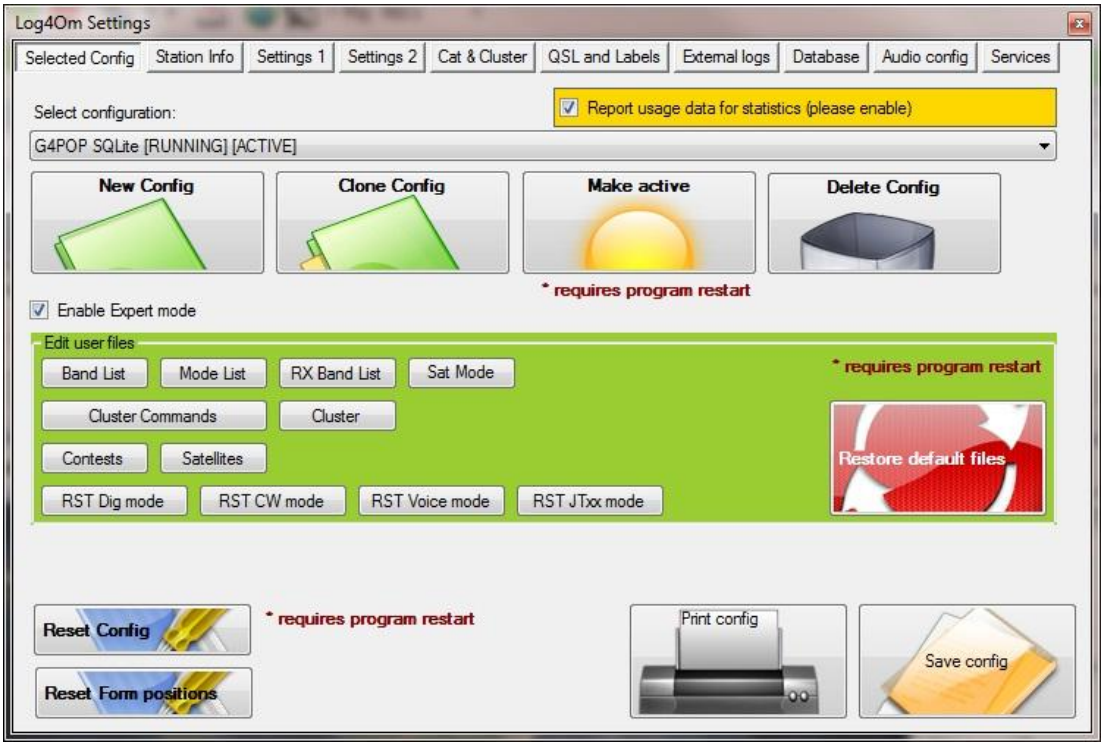
Setting up multiple profiles

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.

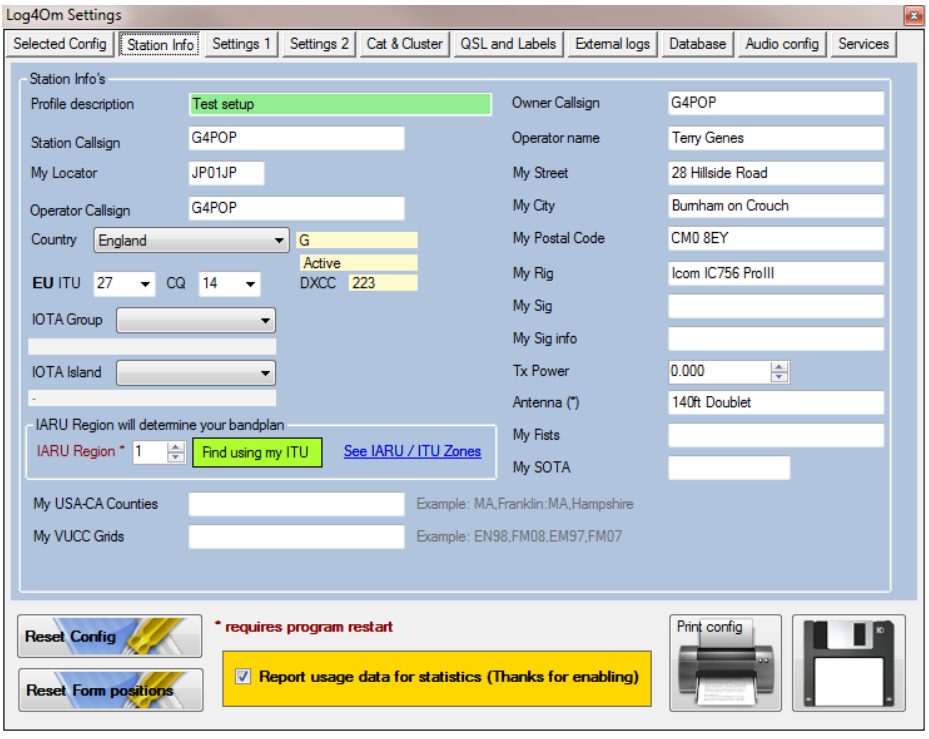
LOG4OM is one of the few logging programs that provide full customisation of different station profiles.

How to set up multiple profile configurations

In the ‘Settings’ window select the first tab ‘Selected Config’.

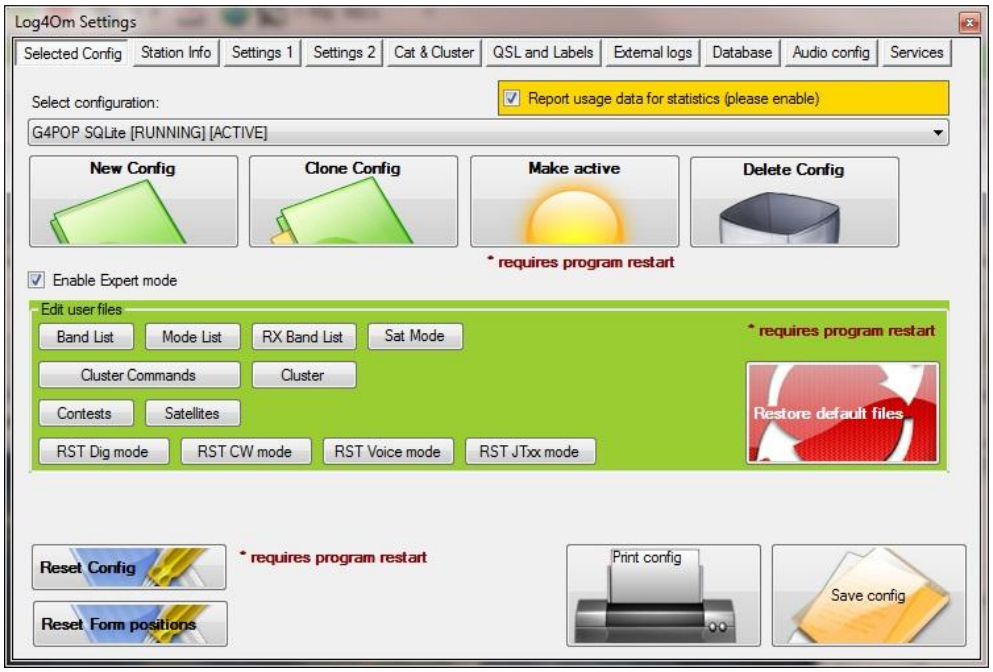


If most of the new profile information is the same as the selected profile then select 'Clone Config' and proceed to the 'Station Info's' tab....

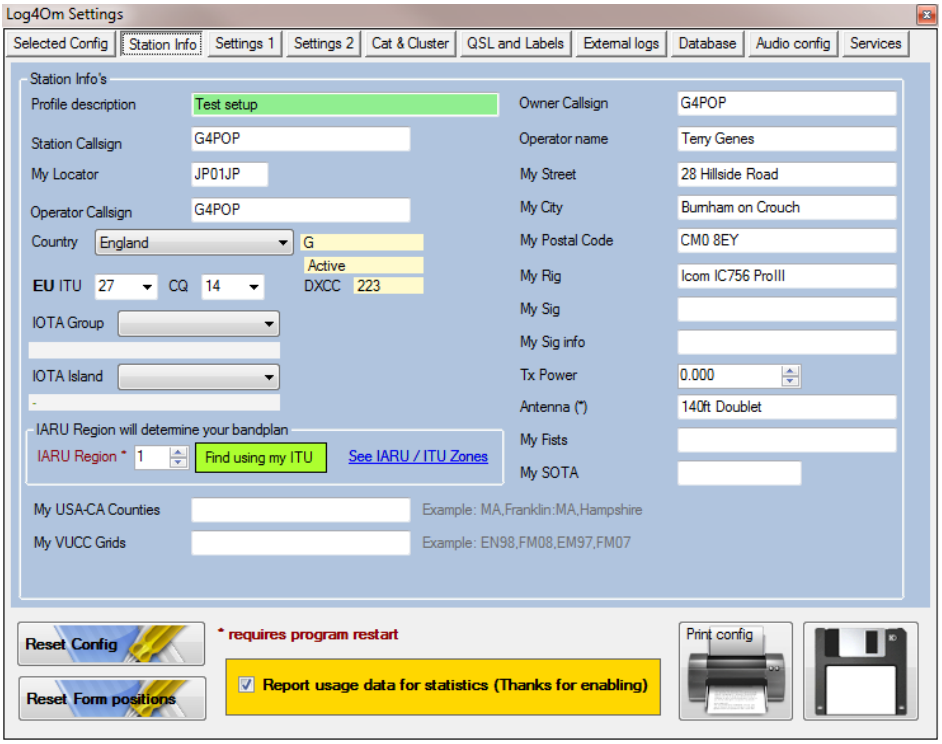


Change the profile description and change any other information required on all tabs, and click 'Save config'.

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.

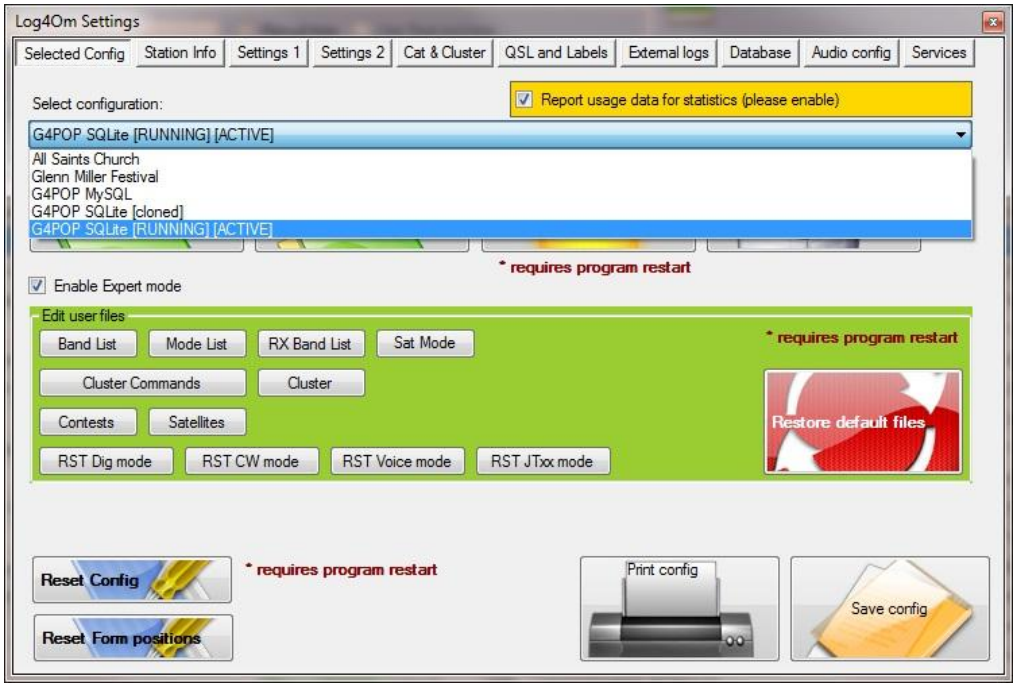


Enter the desired Profile description where it shows ‘New Configuration.

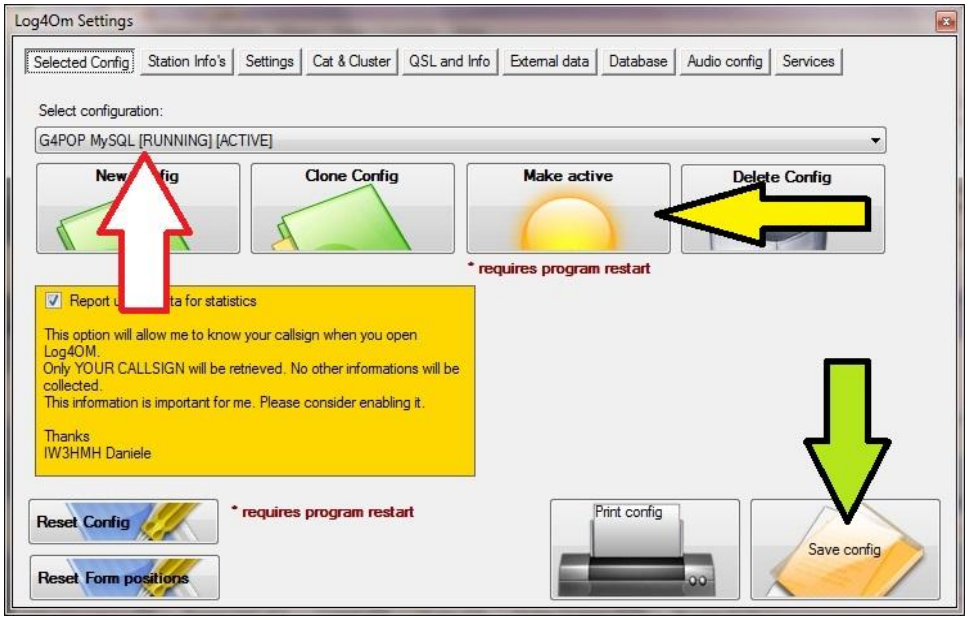


Complete the information relevant to the new profile on all of the tabs and click ‘Save Config’. The settings window will close and revert to the original profile.

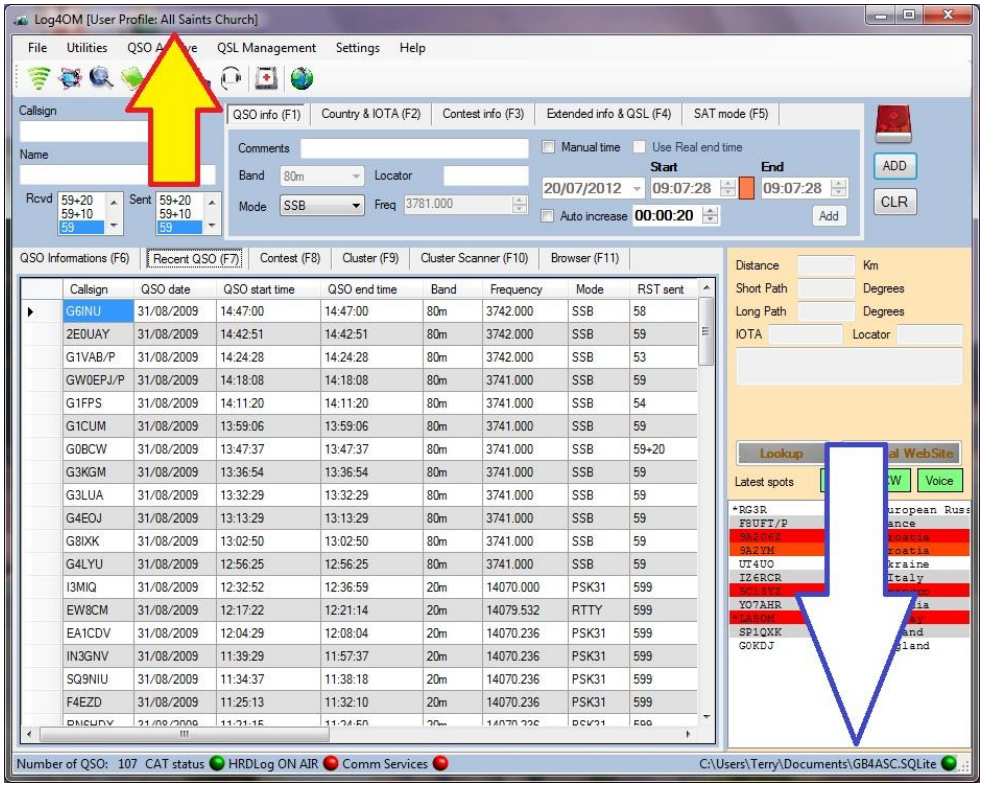
To use the new profile, it must be made active so restart the program and open the ‘Settings’ window again. Then select the required new profile from the drop down list.



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.

Step by Step

1. In the Options/Select Config tab create a new Config (Or clone an existing one) with a unique name for the alternative set up.

2. Click the 'Make Active' button

3. Copy the Config ID and create a new Log4OM desktop shortcut

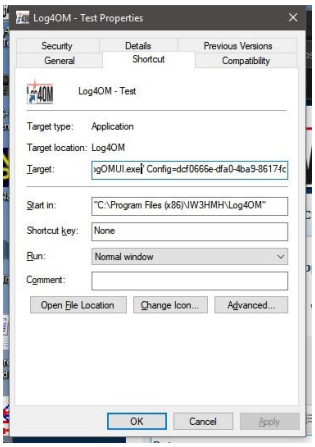
4. Add the Config ID to the shortcut 'Properties/Target string like:

"C:\Program Files (x86)\IW3HMH\Log4OM\LogOMUI.exe" Config=dcf0666e-dfa0-4ba9-8617-fca69aa76ec4

Be certain to leave a gap between the inverted commas (") and the first letter of 'Config' or you will get an error message when you click 'Apply'.

Give the short cut a recognisable and unique name so that you can easily identify it.

click 'Apply' and then OK



5. Click the save icon (Floppy disk button at lower right of the Log4OM window.

6. Close and restart Log4OM by clicking the newly made shortcut and make sure that the name of the new Config is displayed in the top ribbon bar of Log4OM.4
7. Check that all of the information in the options are as required like the station Info re call signs and grid references and the upload information for On line logbooks like LOTW, QRZ etc and then save the Config as before.

8. Go to the file menu and select open database, select the database to be used with this configuration.

9. Restart the program and check that the correct database has been opened.

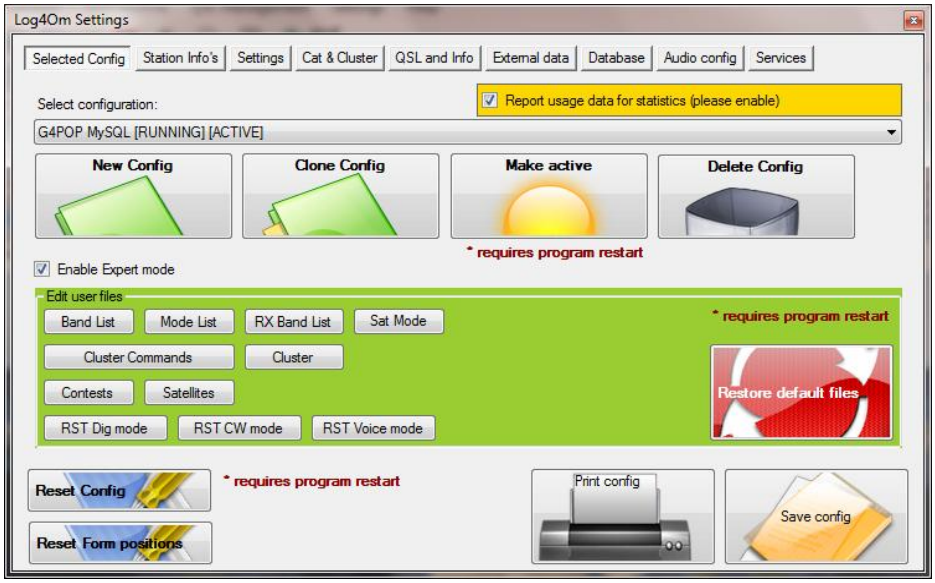
Now repeat steps 1 to 9 for the next configuration

Once all of the required configurations have been set up just click the appropriate shortcut to open the required set up.

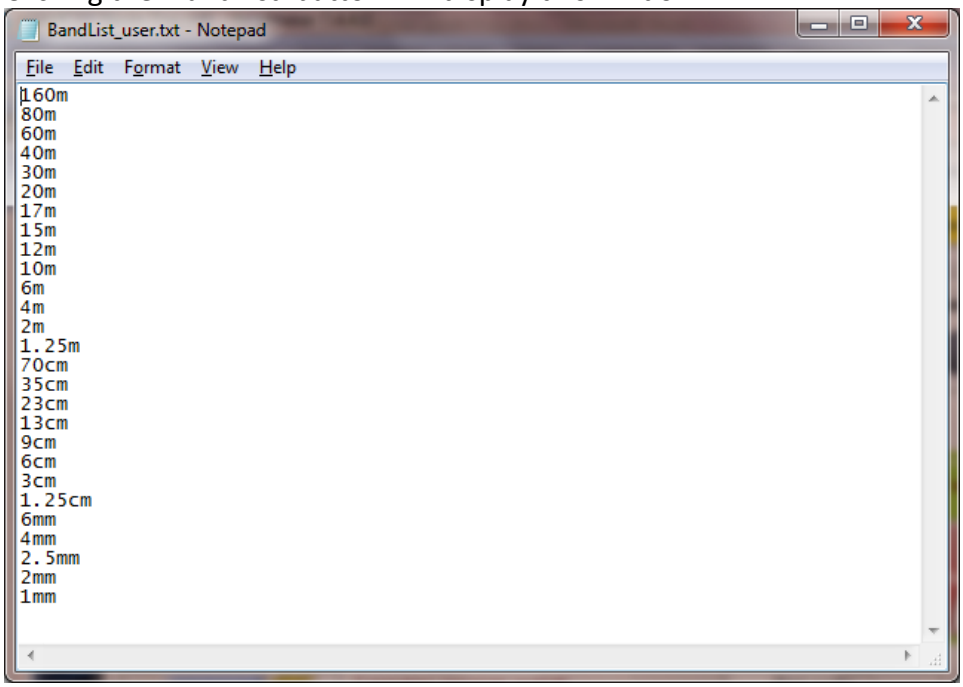
Editing User files

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

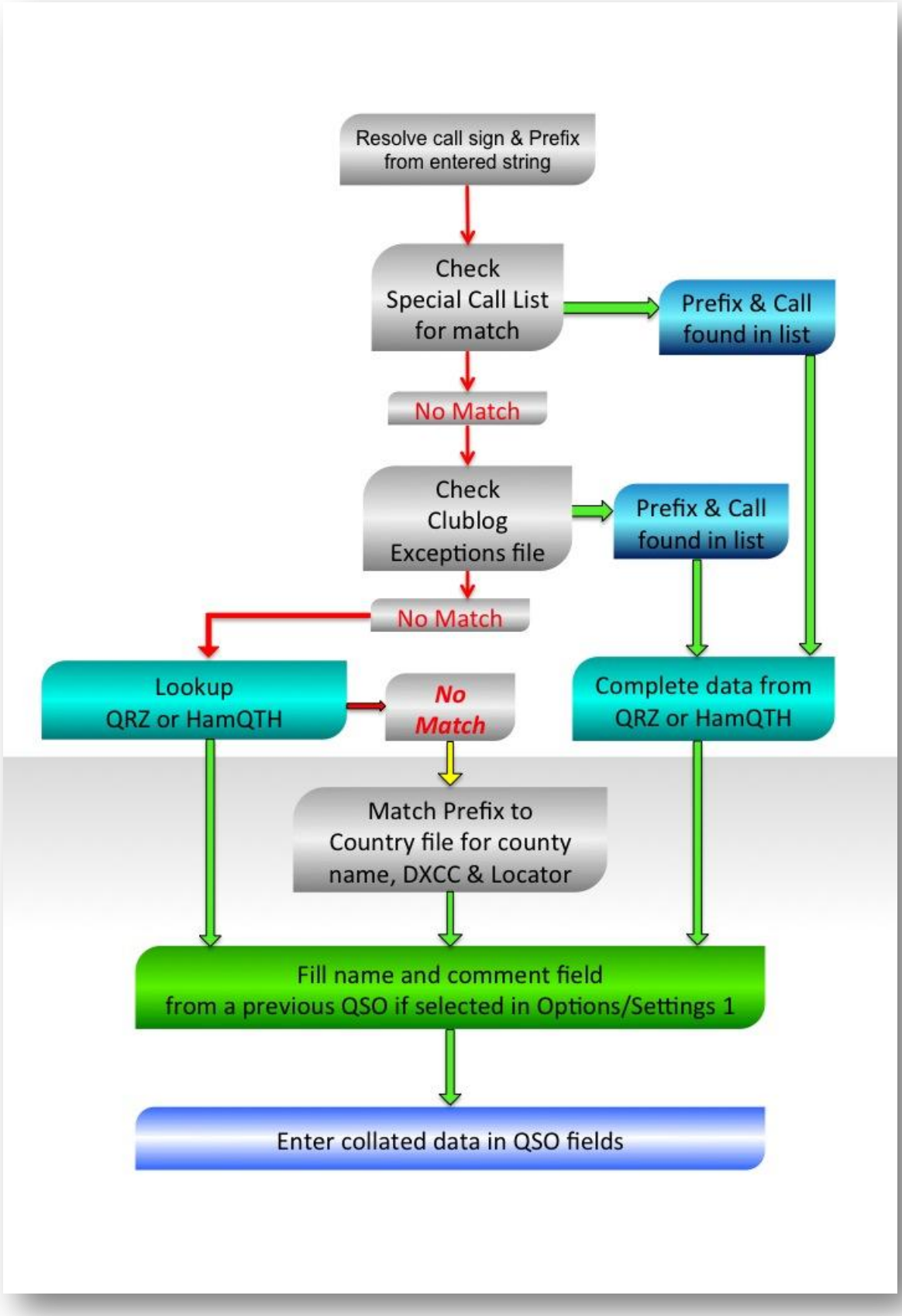
QSL route

Heading and distance to Montserrat (Not Phoenix Arizona)

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

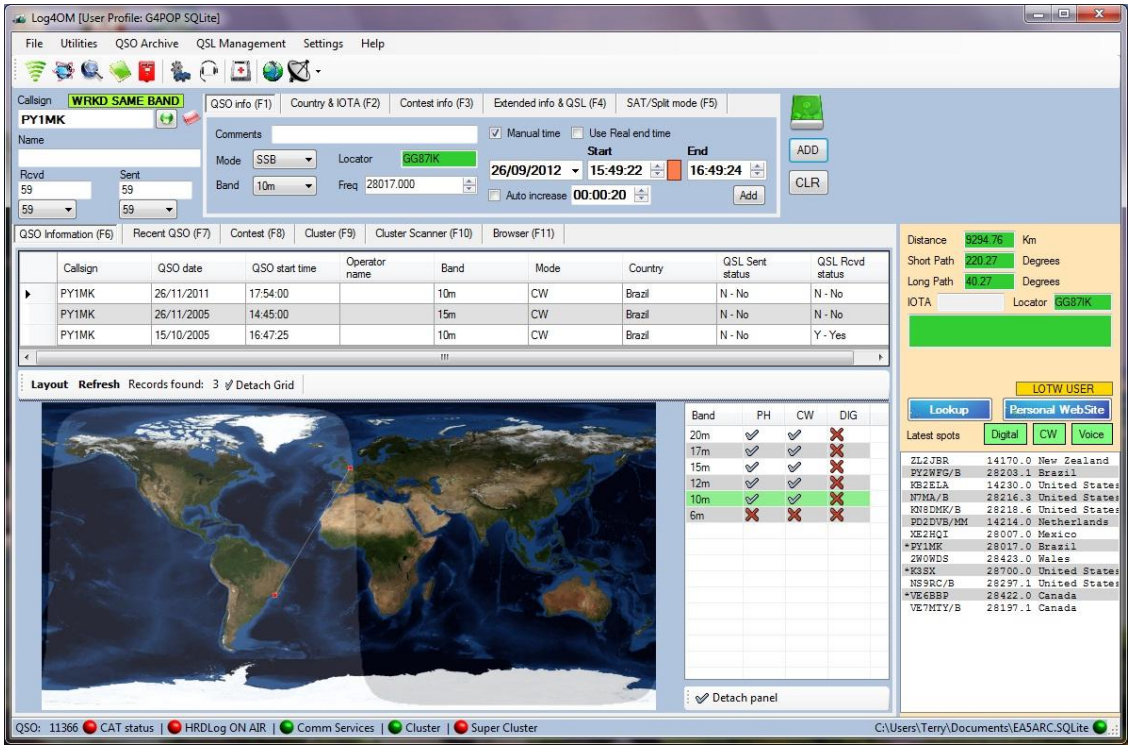
Worked before Band/Mode data for awards = Montserrat

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.


Resolve call sign & Prefix from entered string
Check Special Call List for match
Prefix & Call found in list
No Match
Check Clublog Exceptions file
Prefix & Call found in list
No Match
Lookup QRZ or HamQTH
No Match
Complete data from QRZ or HamQTH
Match Prefix to Country file for county name, DXCC & Locator
Fill name and comment field from a previous QSO if selected in Options/Settings 1
Enter collated data in QSO fields

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)

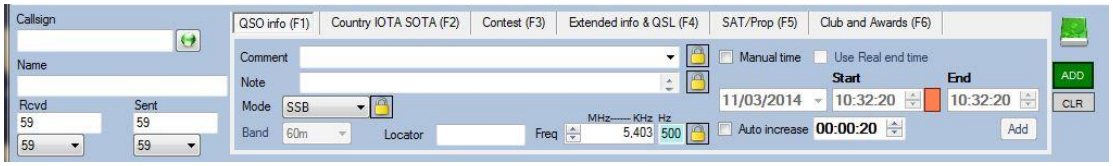
Use the cursor keys to move the cursor within a field or to select from a list. e.g. to select a spot from the cluster F9 window or a country from the 'Countries' list in the F2 pane.

Bk Sp (Back space) key

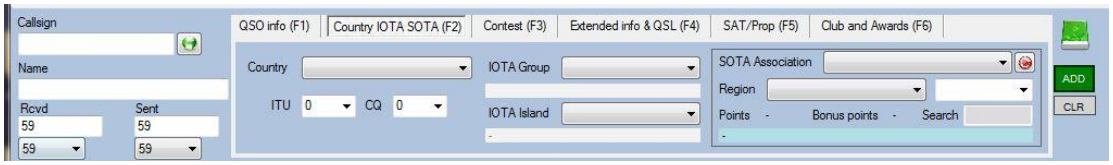
Use this key to delete any unwanted characters that have been entered.

Function Keys

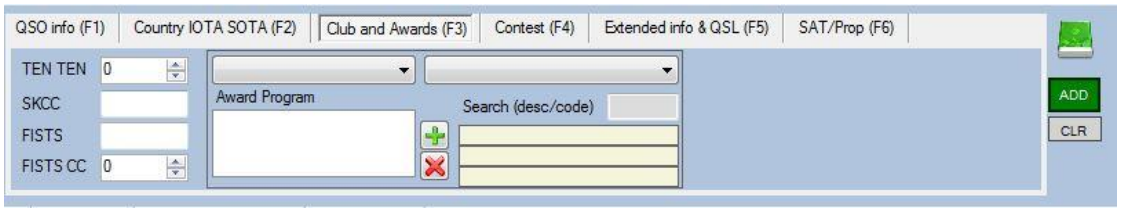
F1 – Opens the QSO information pane.



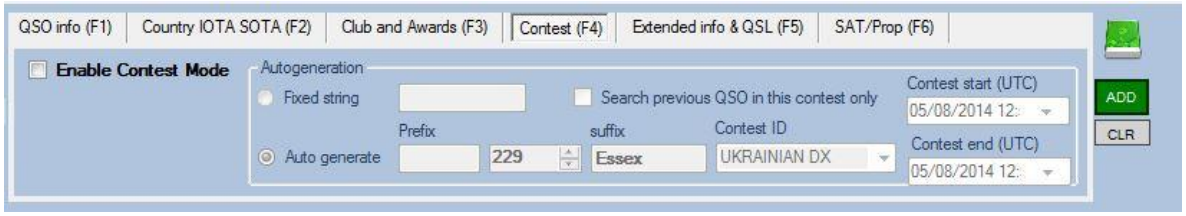
F2 – Activates the Country & IOTA window.



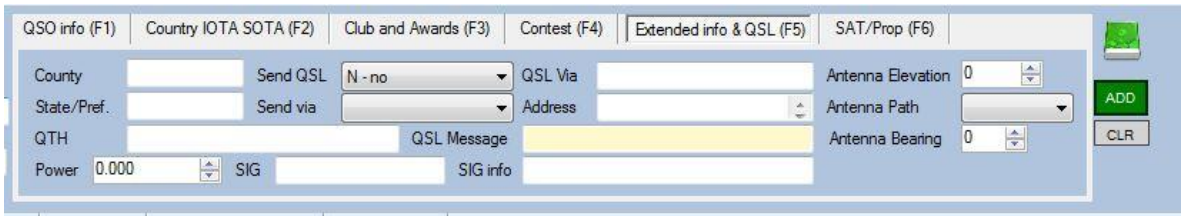
F3 – Club & Awards tab



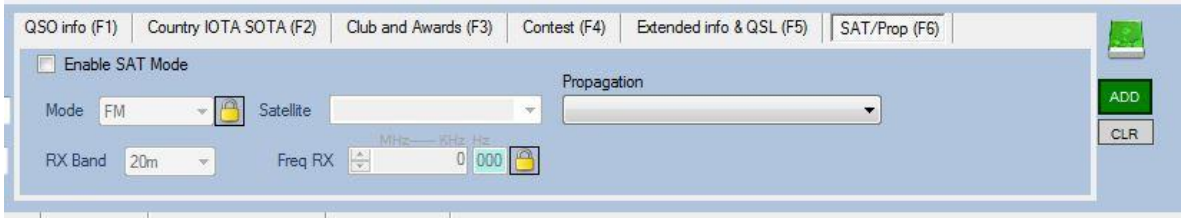
F4 – Contest Tab - to enable check the ‘Enable Contest Mode’ box.



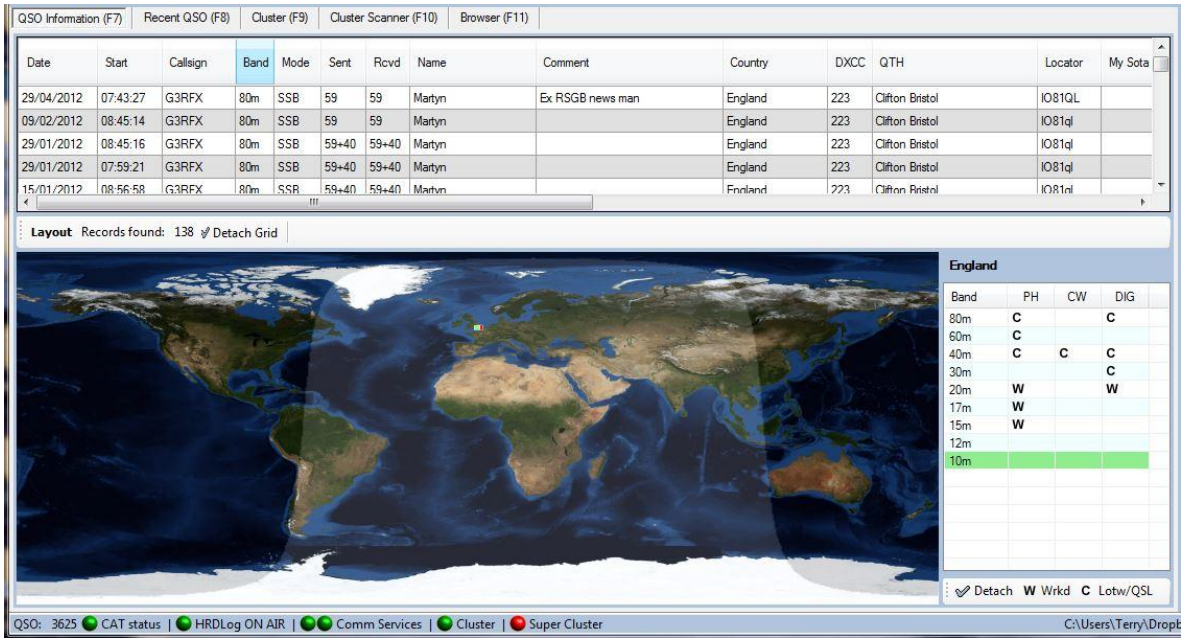
F5 – Extended Info & QSL



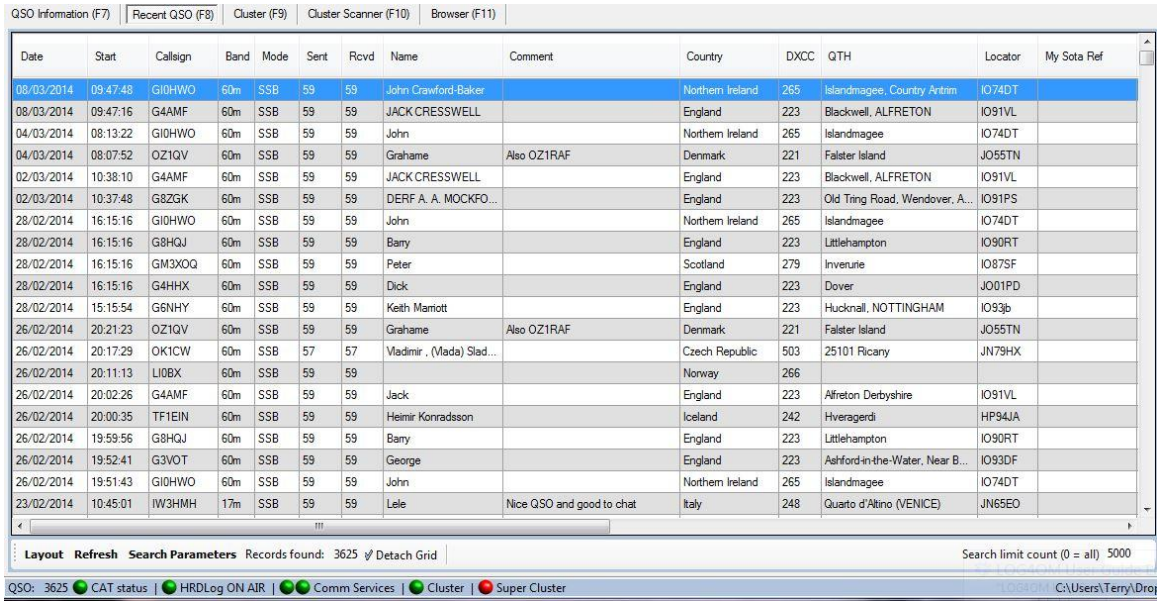
F6 – Sat/Prop (Satellite and Propagation tab)



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



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



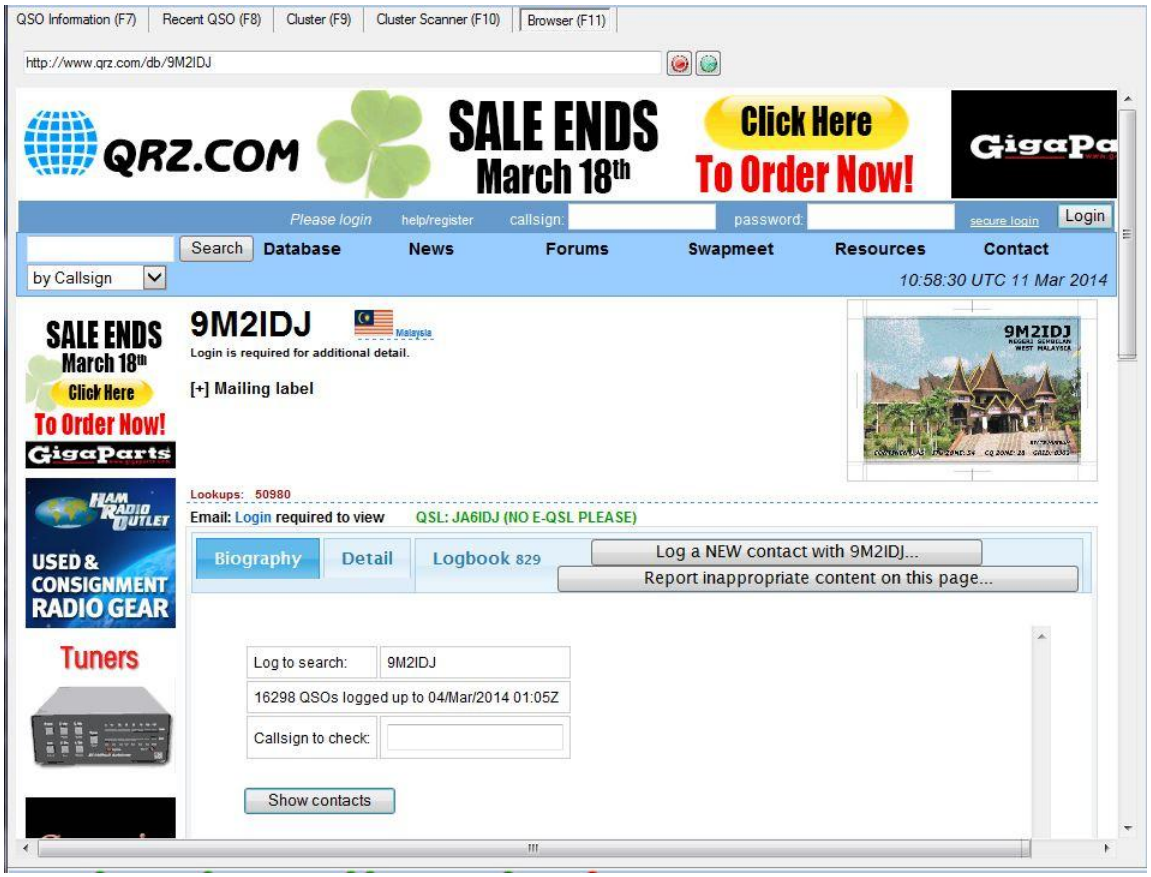
Date	Start	Callsign	Band	Mode	Sent	Rcvd	Name	Comment	Country	DXCC	QTH	Locator	My Sota Ref
08/03/2014	09:47:48	GI0HWO	60m	SSB	59	59	John Crawford-Baker		Northern Ireland	265	Islandmagee, Country Antrim	IO74DT	
08/03/2014	09:47:16	G4AMF	60m	SSB	59	59	JACK CRESSWELL		England	223	Blackwell, ALFRETON	IO91VL	
04/03/2014	08:13:22	GI0HWO	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	GI0HWO	60m	SSB	59	59	John		Northern Ireland	265	Islandmagee	IO74DT	
28/02/2014	16:15:16	G8HQJ	60m	SSB	59	59	Barry		England	223	Littlehampton	IO90RT	
28/02/2014	16:15:16	GM3XOQ	60m	SSB	59	59	Peter		Scotland	279	Inverurie	IO87SF	
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 , (Vlada) Slad...		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	Hveragerdi	HP94JA	
26/02/2014	19:59:56	G8HQJ	60m	SSB	59	59	Barry		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	GI0HWO	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	

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

Time	Callsign	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	tnx 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	Armenia	28021.0	simplex tnx Karen 73 Helmut	10m	CW	DJ7YP	143	1032Z DL1A
1051Z	R2014G	European Russia	14000.0	impossible not exist	20m	CW	EA6SA	334	1047Z DK0A
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 tnx 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 Ge
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	GA5CX	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 Radi

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.



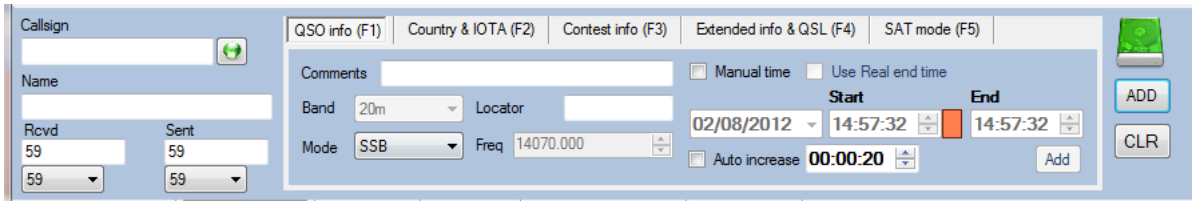
Windows keyboard shortcut keys

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

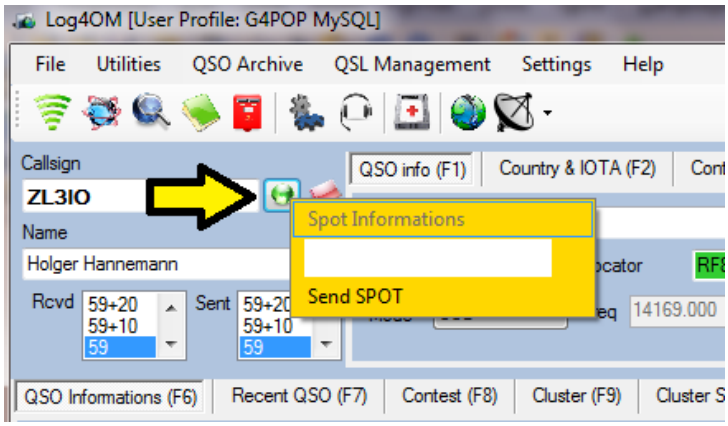


When the application is started, the cursor is automatically positioned in the CALLSIGN field. Entering a call sign queries the logbook database for duplication of the QSO and validity.

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 "aaaaaaaaaaa" 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.

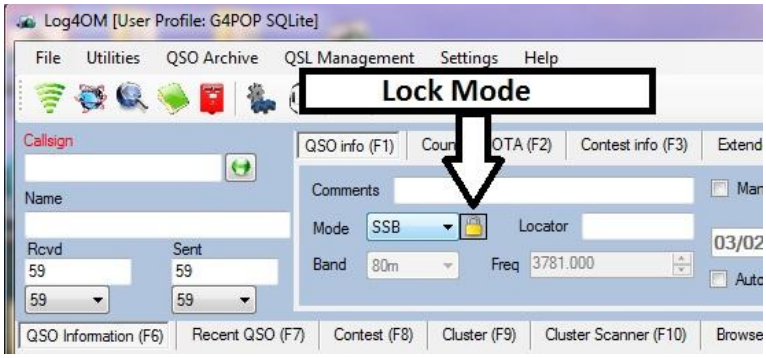
Date and time are entered automatically or manually. If the user is operating in CONTEST mode, it is necessary to include the RECEIVED contest exchange information (one press of the Enter key allows one to bypass this limitation, forcing the insertion).

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

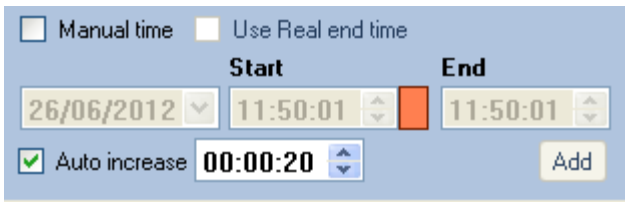
Mode Lock

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.

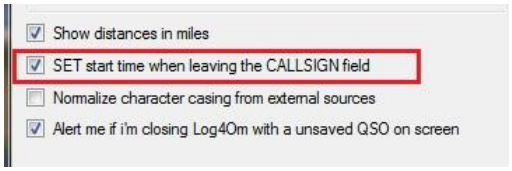
To facilitate accurate log keeping when using these other modes the 'Lock' button will ensure that the selected mode is retained regardless of the mode being returned from the radio via CAT.



Time Management



- In the Options/Settings 2 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. In "Manual time" mode right click on the start or end times will set those times to the current time.

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

Procedure for entering time manually

1. Check the manual time check box
2. Set the start time using the Page up and page down keys when you make/made contact with the other station, alternatively type the time into the field or use the up/down arrows.

TIP: If entering a current QSO click the red button on the right of the start time field to set the current time or right click in the start time field.

3. To set the end time of the QSO right click on the end time field.

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.

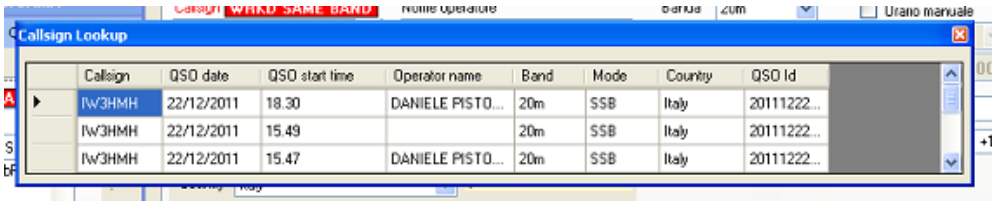
HINT: Click the right mouse button on the calendar to set the date / current time (UTC).

Call Lookup

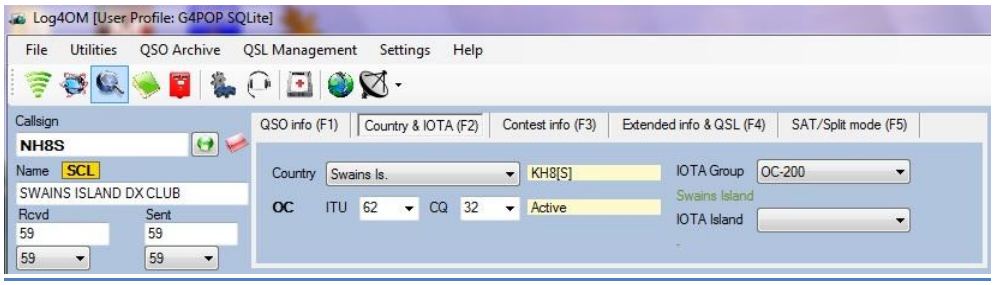
The screen above indicates that the call has been worked on the selected band.

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

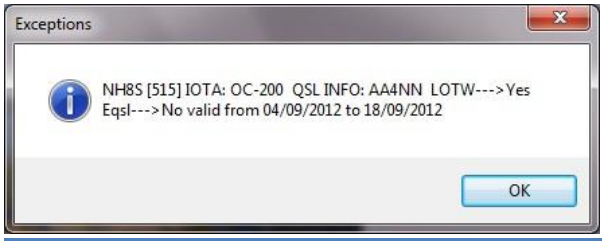
Clicking on the 'WRKD SAME BAND' or 'Worked' will display previous QSOs with the call sign entered. (See screen below)



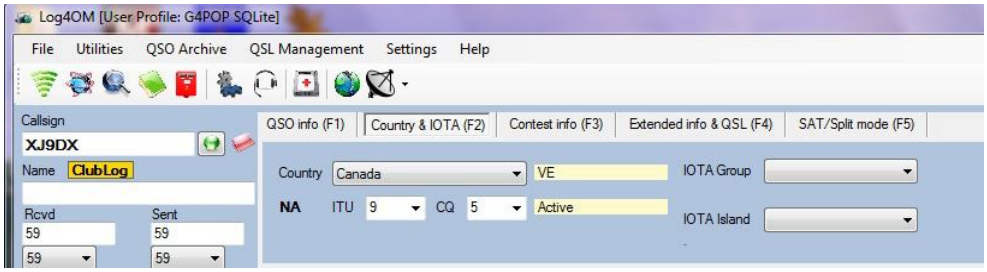
To search for special calls select 'Lookup' from the Special Call List (SCL). If the required call sign is in the SCL, the full details of the QSO will appear in the QSO fields and the SCL icon will appear below the call sign. (See below)



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

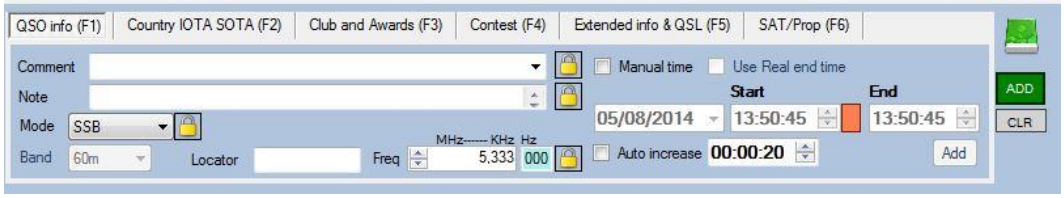


Selecting ClubLog from the settings menu causes the information from ClubLog call exceptions list (CEL) to be entered into the QSO fields of any call that appears in the downloaded CEL.



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

QSO Information (F1)



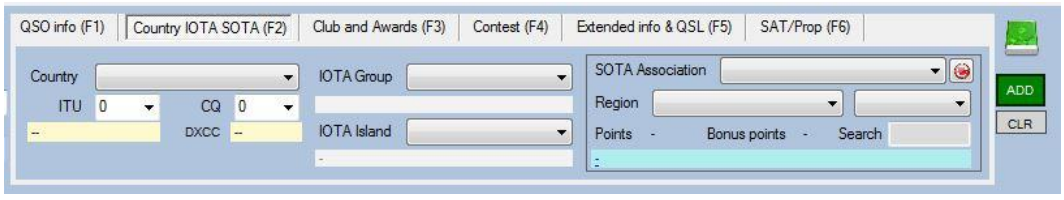
The user can add a comment to the QSO or set the Band, Mode and Frequency.

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.

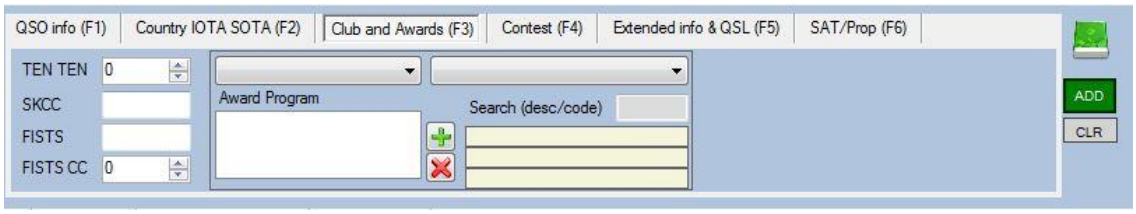
TIP
The user can 'Tab' between QSO fields and type information into the fields. Pressing 'Enter' (return) on the keyboard will add the updated QSO, thereby saving time when operating a pile up or in a contest.

Country & IOTA - SOTA (F2)



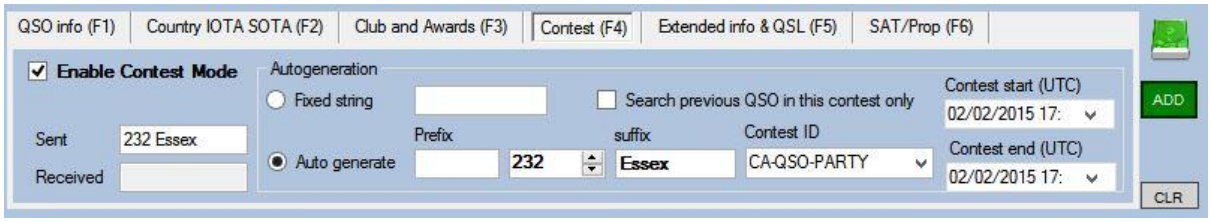
This window contains detailed information about the country, IOTA & SOTA for the call sign. This information is downloaded from QRZ.COM or HAMQTH.com, or inserted manually by the user.

Club and Awards (F3)



Entry tab for club ID's and awards data – **See the "Awards Manager" section for full instructions**

Contest info (F4)

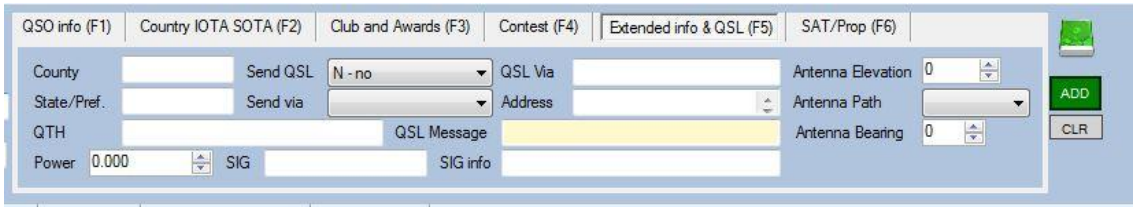


It is possible to display basic information relevant to the current contest when using LOG4OM during a contest. (See screen above) The exchange can be incremented automatically for each new QSO and the exchange sent is displayed in the 'SENT" field as above. The received exchange must be entered manually.

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's refer. This option allows the user to export an ADIF file with the correct information for conversion by an external program into 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

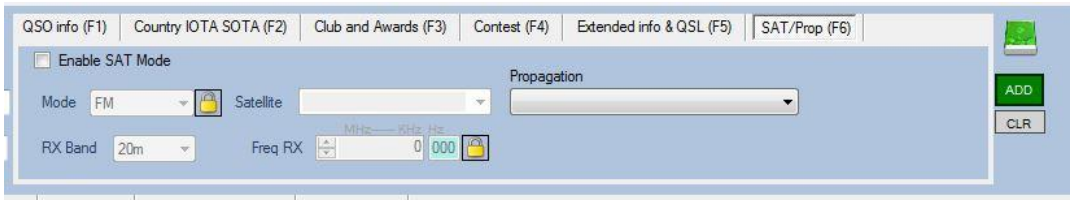
The relevant information is added automatically for each QSO according to the lookup selections made.

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

Power

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

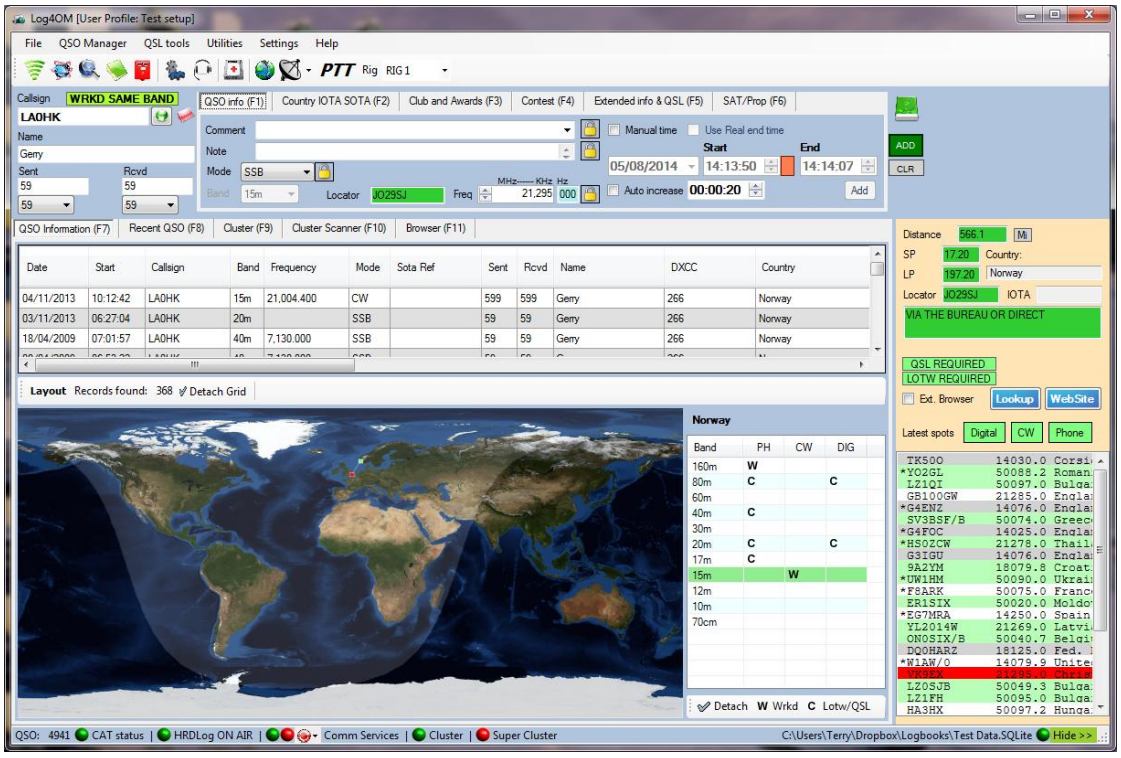
Sat/Split Mode (F6)



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)



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.

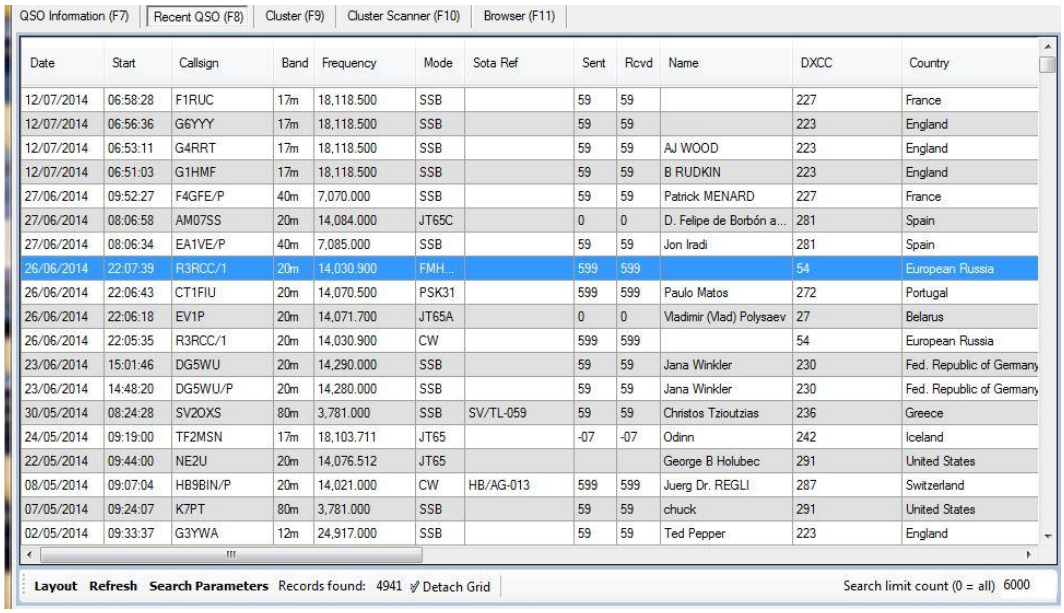
The values of distance and bearing are calculated from the QRA locator of the station or, if it is unavailable, the centre of the country.

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)

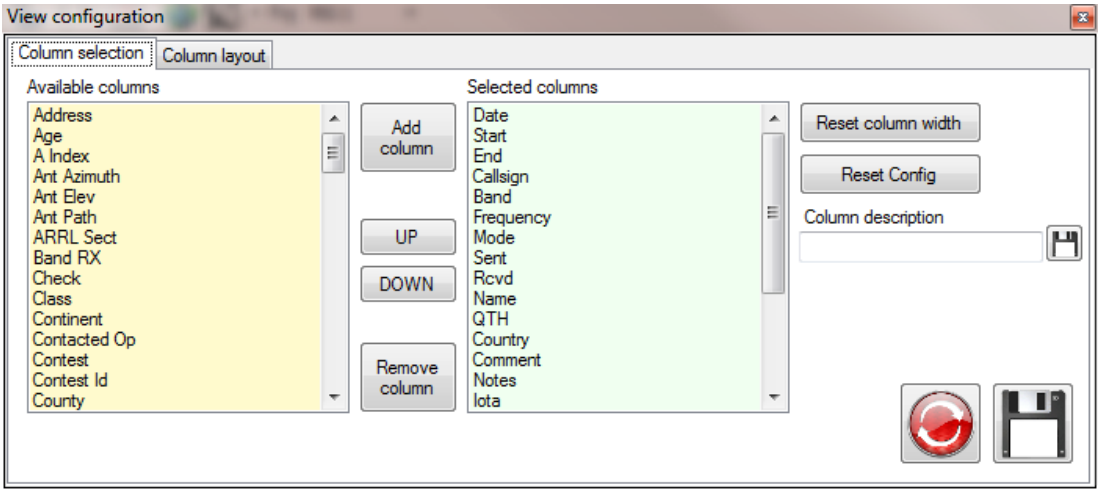


Date	Start	Callsign	Band	Frequency	Mode	Sota Ref	Sent	Rcvd	Name	DXCC	Country
12/07/2014	06:58:28	F1RUC	17m	18,118.500	SSB		59	59		227	France
12/07/2014	06:56:36	G6YYY	17m	18,118.500	SSB		59	59		223	England
12/07/2014	06:53:11	G4RRT	17m	18,118.500	SSB		59	59	AJ WOOD	223	England
12/07/2014	06:51:03	G1HMF	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 (Vlad) 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	SV2OXS	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

Column Layout – Titles - Width

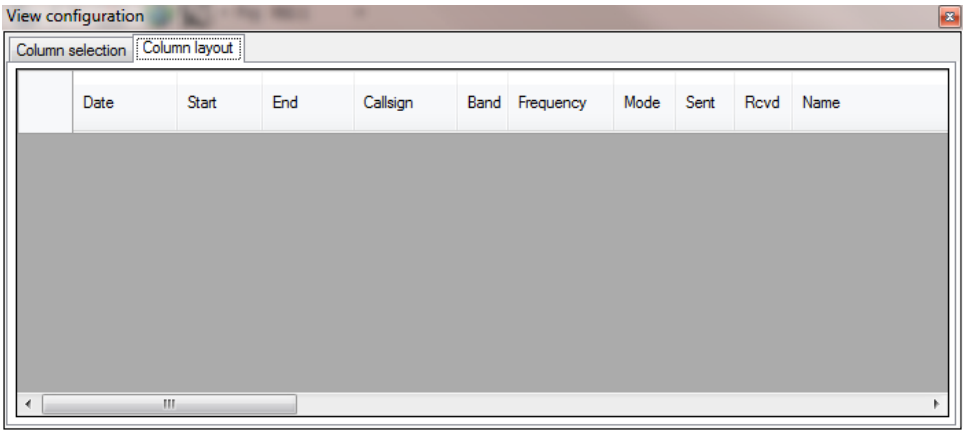
The user can configure the column layout and width for all displays by selecting the 'Layout' button at the bottom left of each screen.

EI8OIRTS	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
II0IDP	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



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.

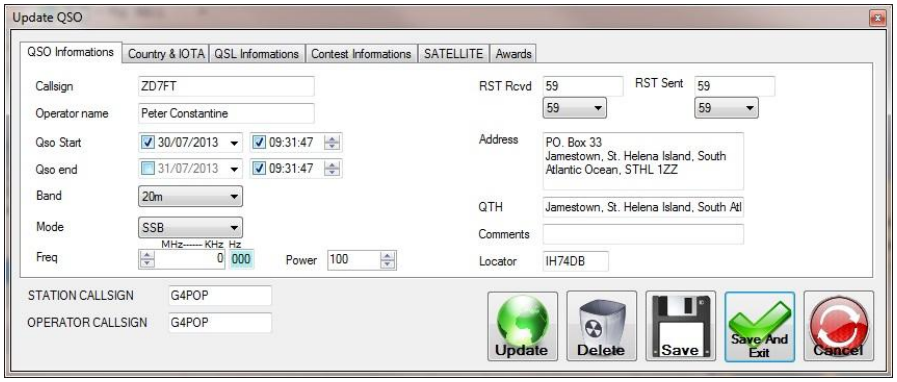
The titles may be changed by selecting the field from the right hand column and editing it in the 'Column Description' window followed by clicking the save icon to the right of the field.



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'.

PLEASE NOTE

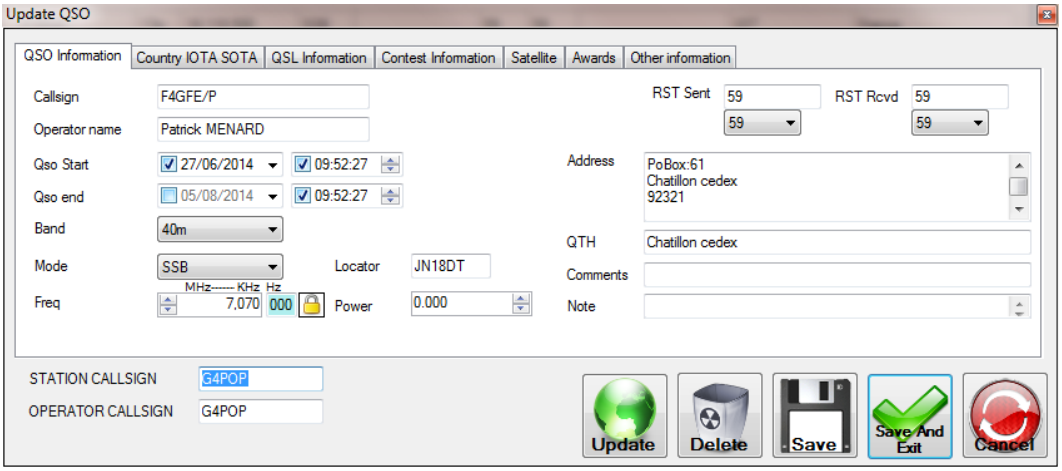
There are very many ADIF fields and if f we tried to display every field in the edit windows the windows would be huge and not fit on some monitors.

Therefore we provide the fields most likely to be changed often and those that need editing infrequently are dealt with in the archive manager. e.g. My City etc

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.

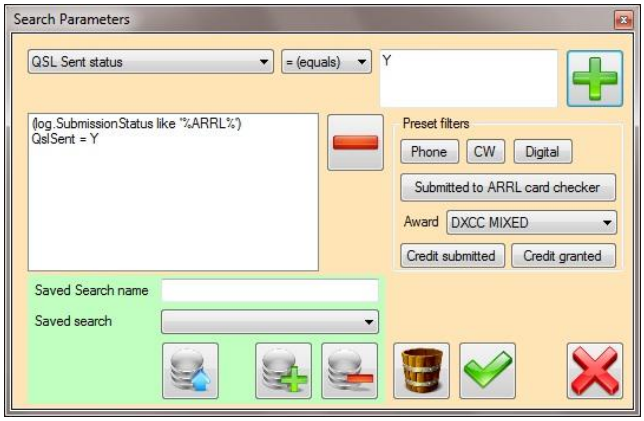
Double clicking one of the filtered QSOs in the F7 'Recent QSO' window provides an'edit' window to update the data for the selected QSO.



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

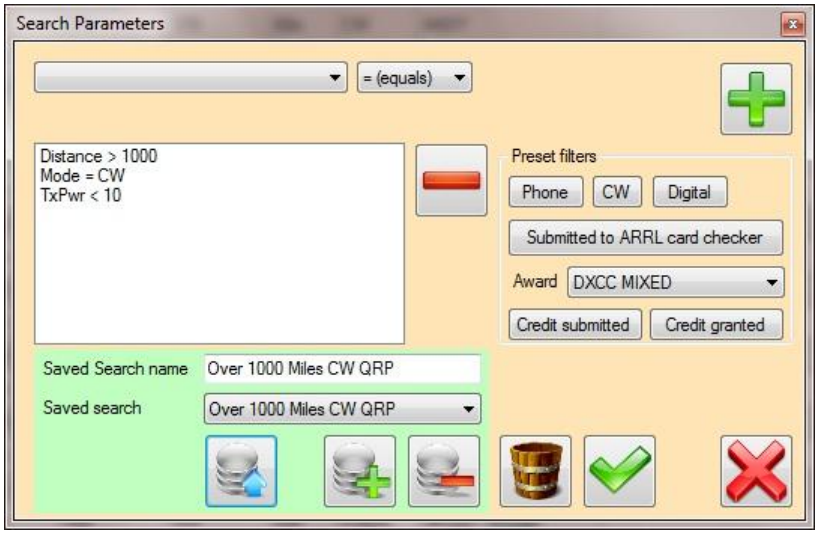
When the search parameters have been completed, click the  button to revert to the main archive window and then, click the 'Search' button.

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

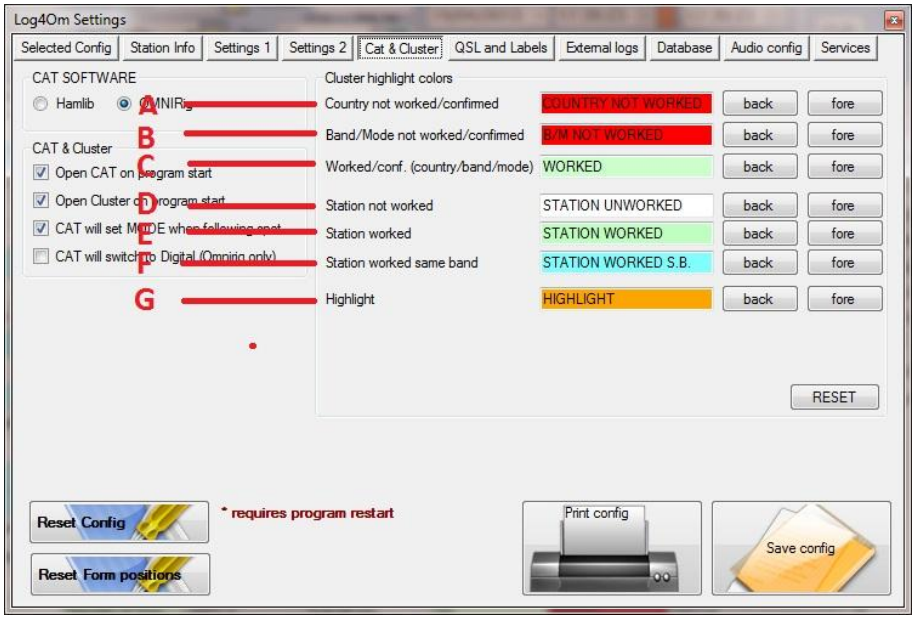
There are several pre-set filters for the more frequently used searches. These are on the right hand side of the 'Search Parameter' window. Clicking on one of the pre-set searches adds the search parameters to the list on the left hand side. –

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.

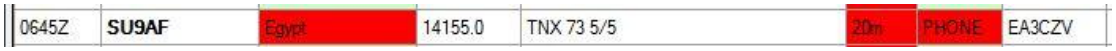
G = Highlights any custom spots selected by the custom filter.

Worked/confirmed filtering

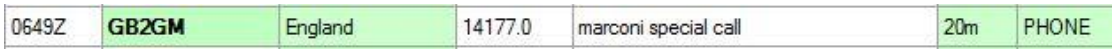
The chosen cluster colours are applied to the five different spot filter views selected from the 'Highlight spot by' menu.

Filter 'By country'

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



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



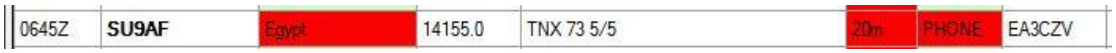
This graphic indicates that the country has been worked on this band and mode.

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

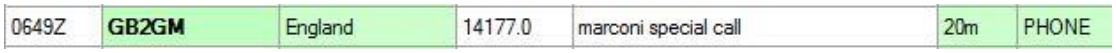
The screen shot above shows that Australia has been worked on this band but has not been worked using CW. – The time highlighted in red indicates that the station is an LOTW user.

Filter 'By QSL received'

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



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



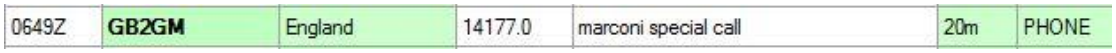
This graphic indicates the country has been confirmed by a QSL card on this band and mode.

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

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.



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

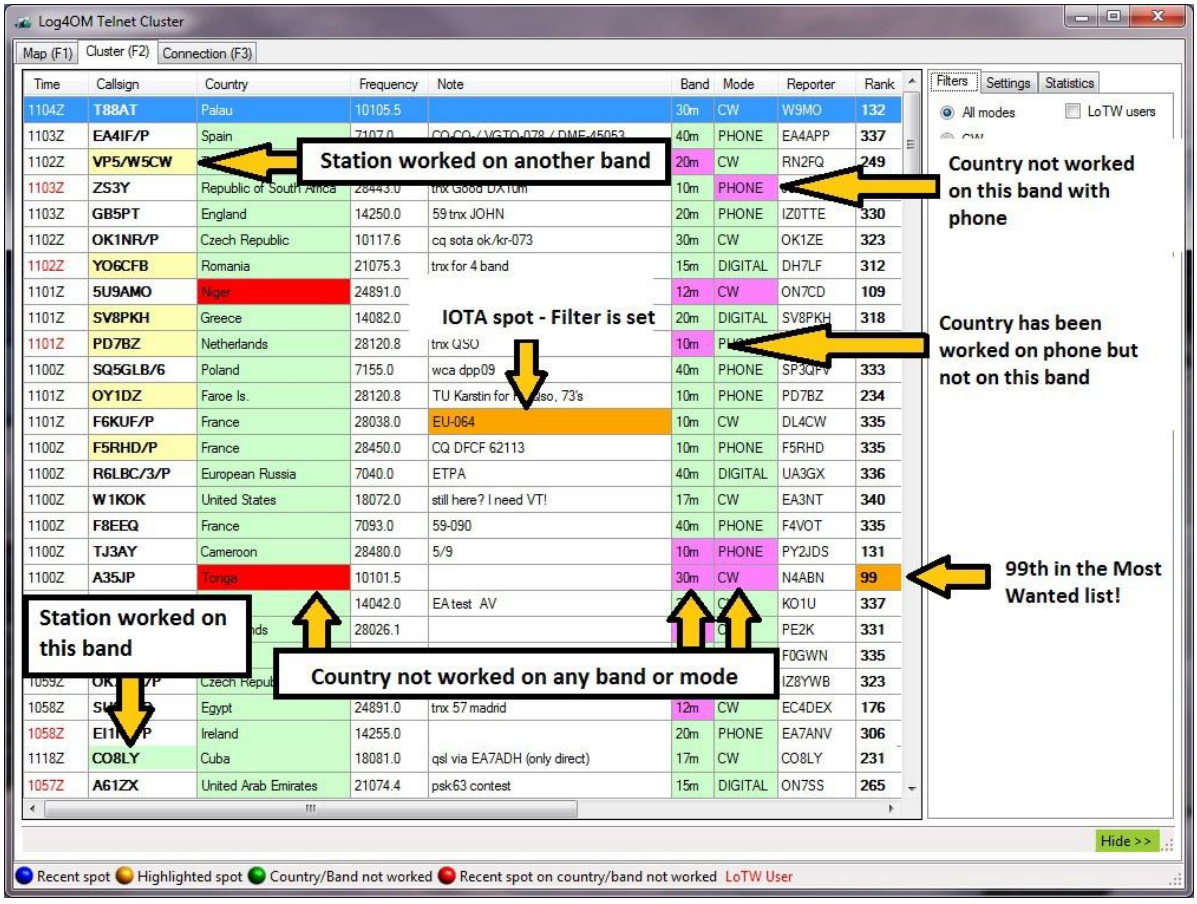
In this image the station E5IJD South Cook Island has been highlighted blue because it has been worked on this spots band and mode.

Time Highlighting

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

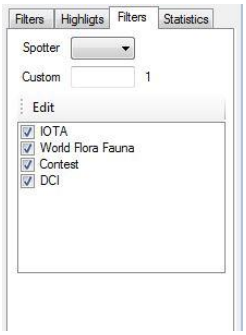
Unworked mode on spot band

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.



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

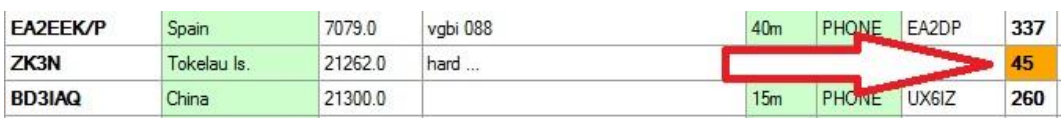
Highlighting is applied to any matching spot as shown in the graphic below.

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.

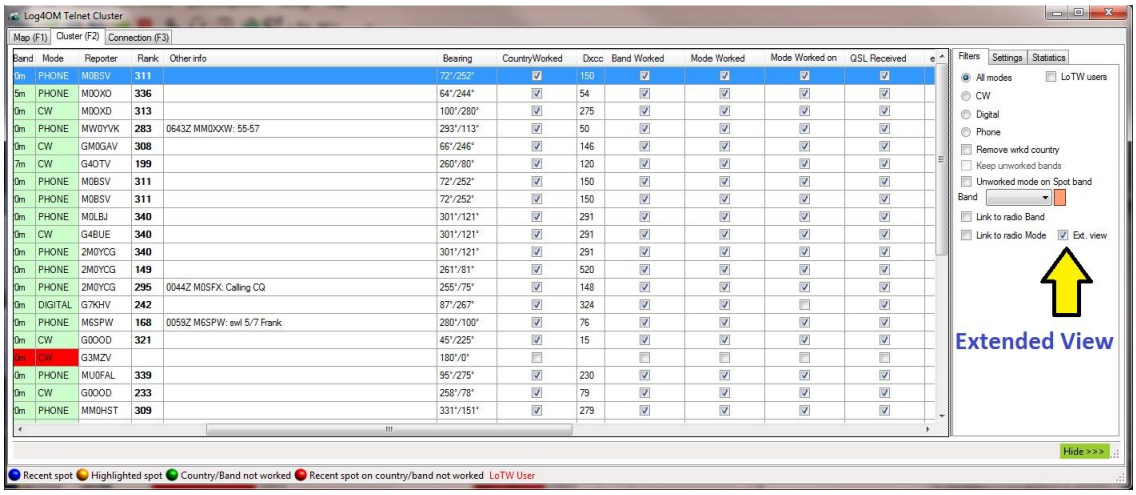
The top 100 most wanted are highlighted as below.

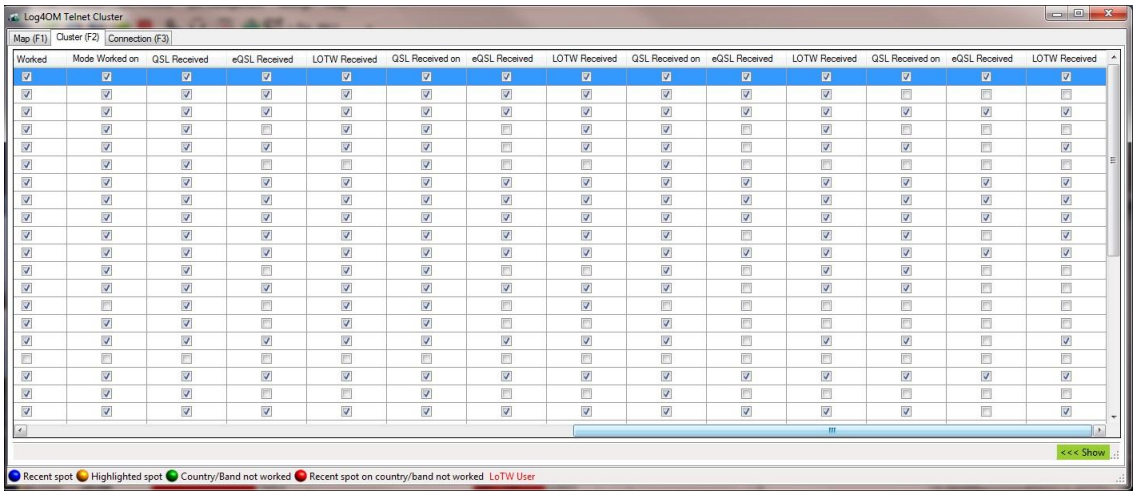


Right click on a spot to display in a selected screen the last 15 comments posted on the cluster relating to that particular spot.

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.





Due to the extent of the information displayed it is necessary to use the slider at the bottom of the window to view all entries.

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.

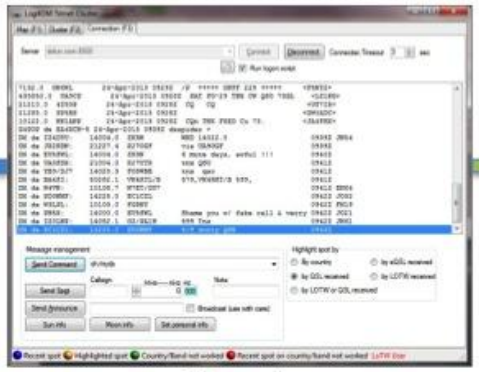
e.g. The normal cluster filters may be set to only show unworked countries and although the user may have worked the USA on many occasions he could still want to be alerted when an American friends call was spotted. In this instance the user would set an alert for the specific call sign of his friend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



Raw unfiltered spots as displayed in F3

Alert configuration

Cluster filters

On screen and audio alerts

By email

Cluster F2/F9

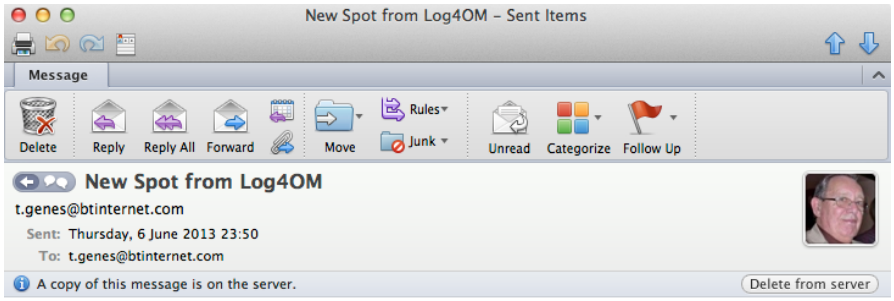
Push alert to mobile phone

Types of Alert

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

Log4OM on-screen alert.

Email

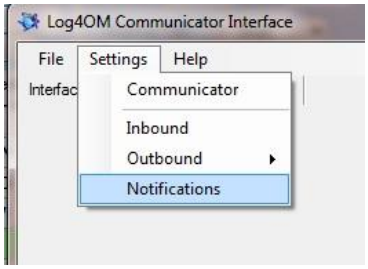


Push message - Unfortunately Growl is no longer available so we suggest using 'Telegram and IFTTT.com as described in the excellent tutorial by LA8UU

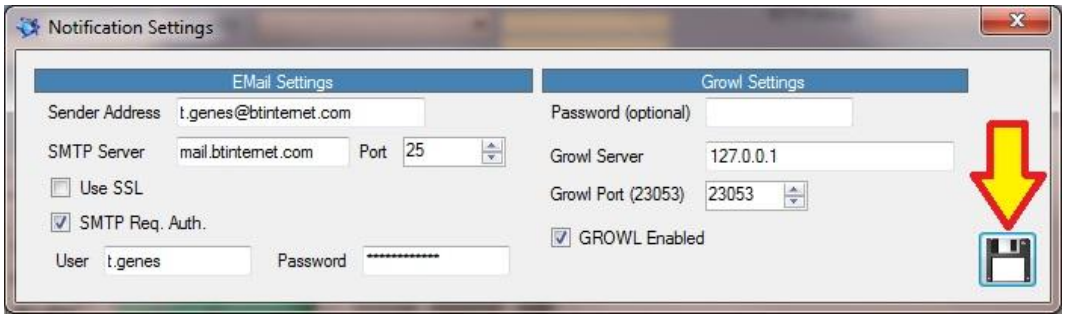
Setting up Log4OM alerts

Communicator

Open the Communicator and stop the service.

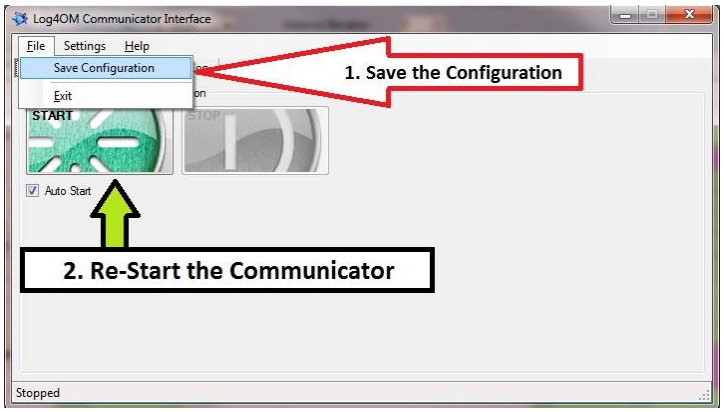


Select 'Notifications' from the settings menu to setup communications for the notifications (Alerts)



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

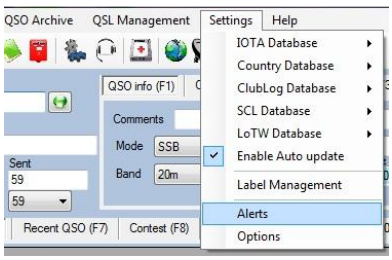
When finished click the 'Save' button indicated by the arrow.



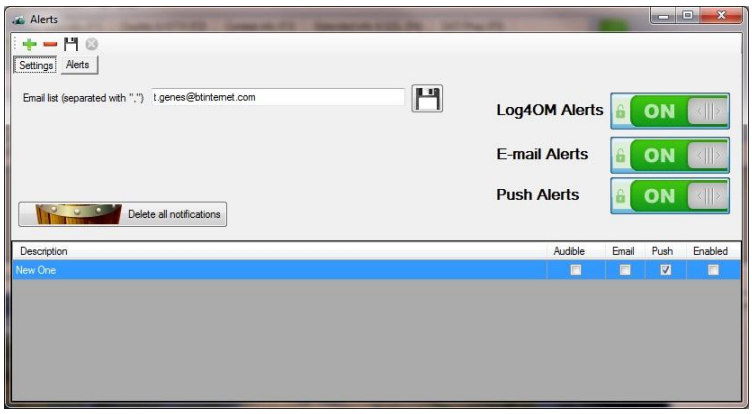
- Save the configuration
- Restart the Communicator
- **Minimize** the Communicator window – **Do not close it!**

Configuring Alerts

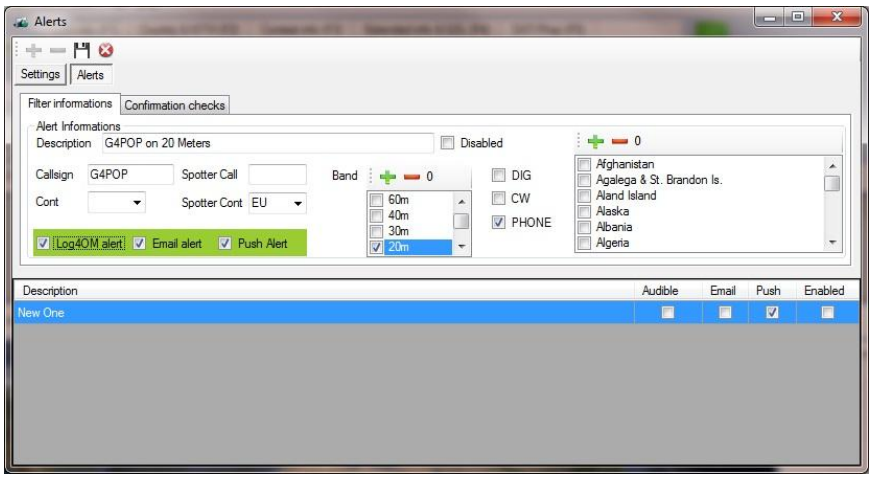
Open the alerts configuration window via Settings/Alerts



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.

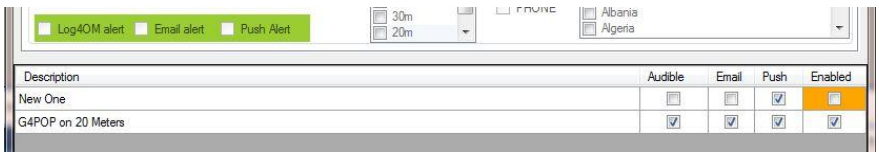


4. Click the ‘Alerts’ button at the top of the window.
5. Click the green plus (+) sign at the top of the window.
6. Enter a meaningful name in the ‘Descriptions’ field, e.g. ’G4POP on 20 Meters’
7. Enter the desired call sign (e.g. G4POP)
8. Select the spotter area (e.g. EU)
9. Select the required band (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.

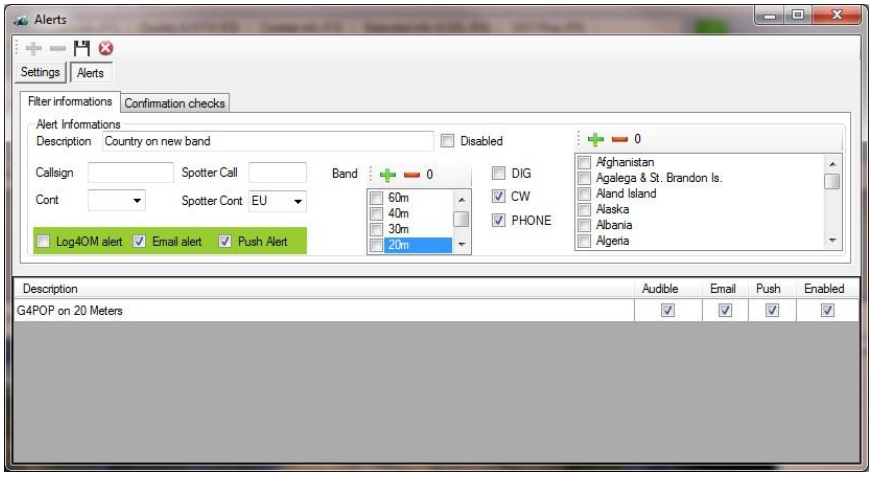
The number shown above the countries and band lists indicates how many countries or bands are selected.

Alerts for wanted Countries or Confirmation

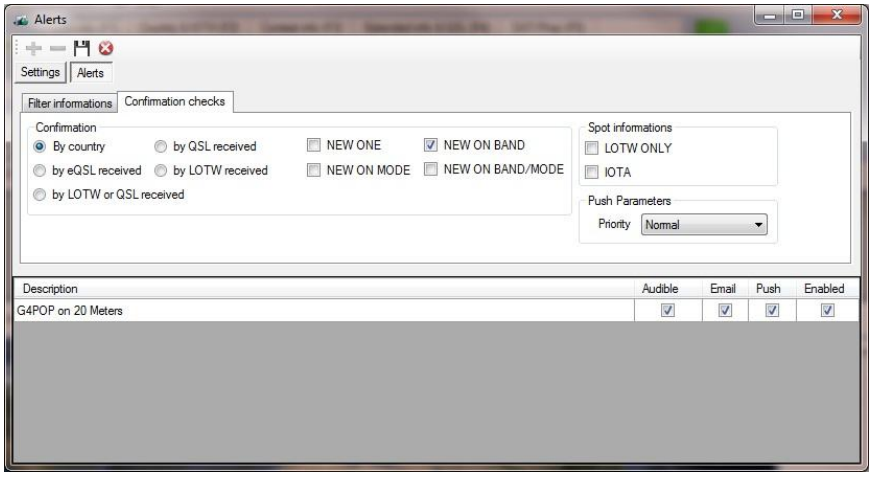
These alerts are pre-set alert filters based on the countries a user has worked and the confirmations he has received.

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.

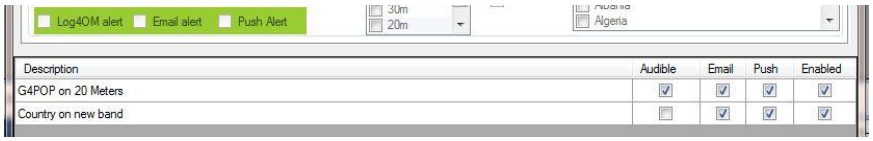
Here is an example of setting up an alert for a country on a new band:



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.

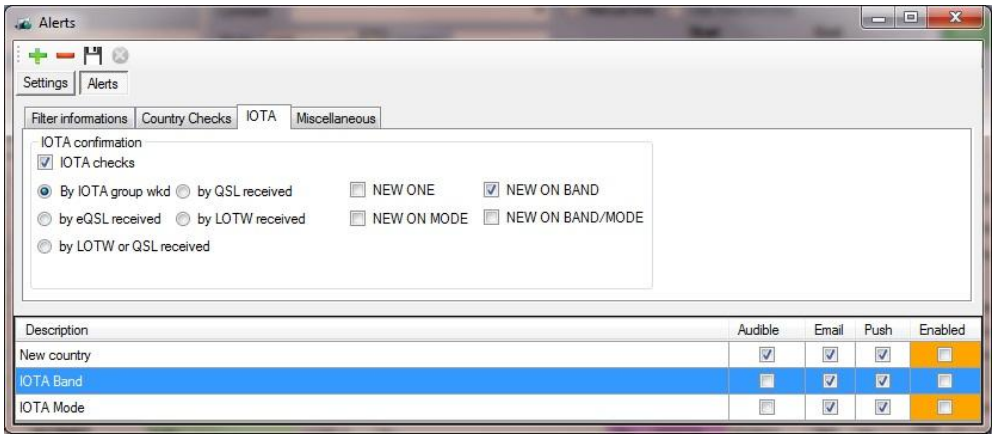


The example above will send an alert by email and by a Push alert to a mobile phone for a spot received from a spotter in the EU for a country using Phone or CW on any band that country has not been worked on before.

Alerts for IOTA

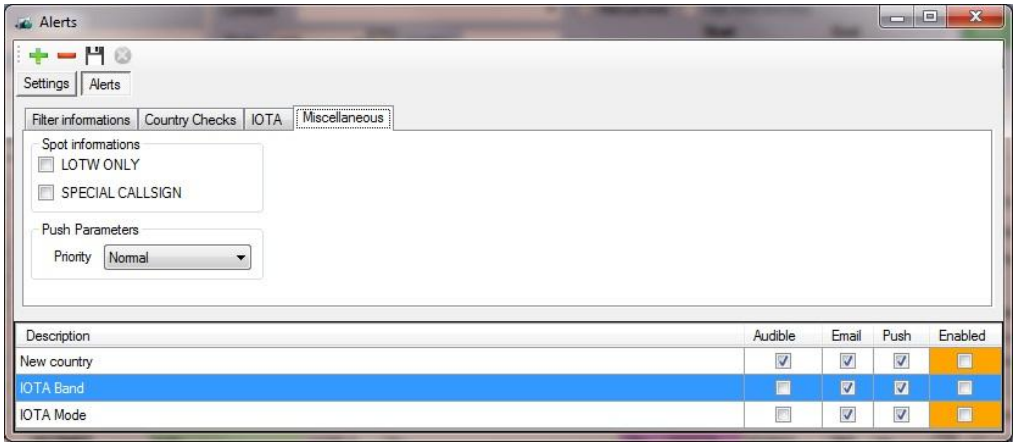
Select the ‘IOTA’ tab in the ‘Alerts’ window and select ‘Enable’ then select the required alert filters.

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.

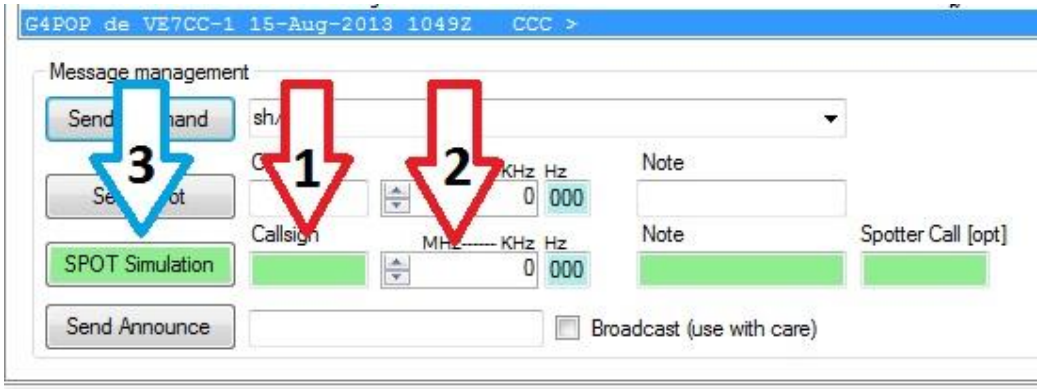
In the cluster F3 window enter a call sign which would trigger the alert, use a country call if checking a country alert etc., into the 'Callsign field indicated by arrow 1 in the image below.

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.



Growl for Windows - NO LONGER AVAILABLE

Unfortunately Growl is no longer available so we suggest using 'Telegram and IFTTT.com as described in the excellent tutorial by LA8UU

Log4OM and IFTTT Howto

LA8UU April 2019

About IFTTT

If This Then That (IFTTT) is a platform where you make *applets* that connect *services*. You can use IFTTT to take an email from Log4OM and forward it to a destination service. That could be Telegram, Messenger, a push Notification to your phone, or you could blink your Hue lights when that super-DX comes on. IFTTT is fast, and it usually just takes seconds for a message to be processed.

Log4OM setup

First, you have to set up Log4OM to send e-mail, as described in the Alert chapter of the documentation.

Note: If you use Gmail with 2-stage authentication (highly recommended!) you must set up an *app password* for Log4OM. Go to your Google account and choose Security – Google logon.

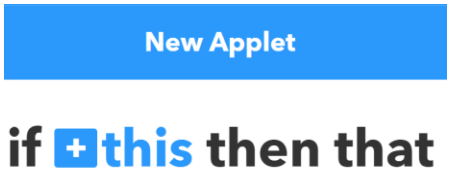
I suggest you set up a test alert at this stage, and direct the emails to your ordinary email account. You can then be sure that Log4OM sends emails properly.

IFTTT setup

Goto ifttt.com *and register an account. Use the same email address as you use for sending email from Log4OM.*

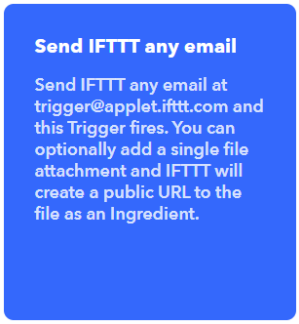
Note: The first time you use a service, you will be asked to log on to the service (if appropriate), in order to authorize IFTTT to access the service.

Now you can set up a ***New Applet*** *in IFTTT.*



Start by clicking on ***+this****.*

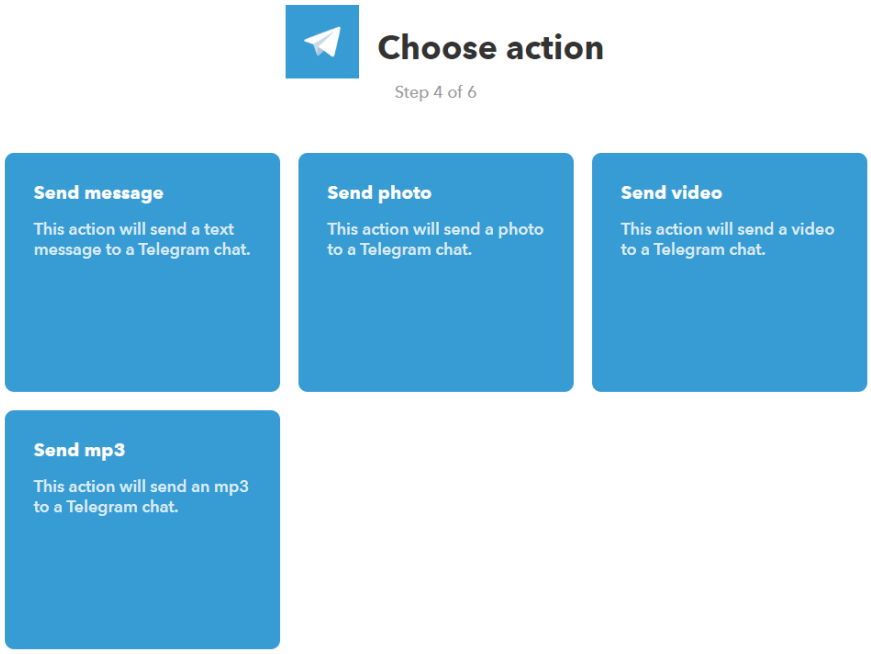
You get a list of services to choose from. Select **Email** and click the trigger **Send IFTTT any email.**

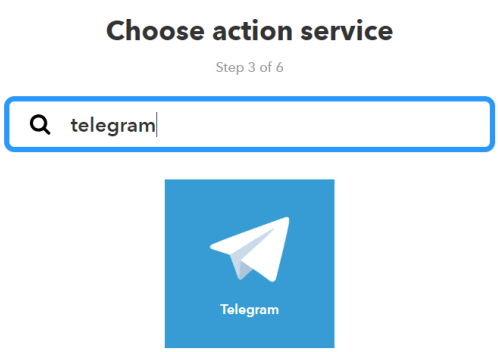


You see *+this* has changed to an email icon. Click **+that**.

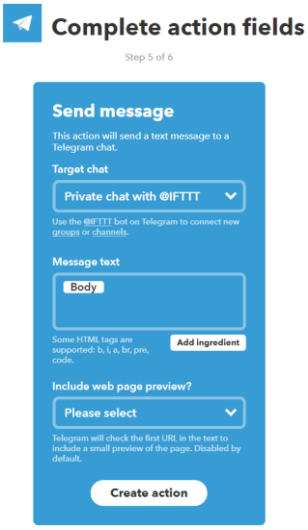
Now you have to choose the *action service*. I use Telegram.

You must choose the action in Telegram. Select **Send message**:

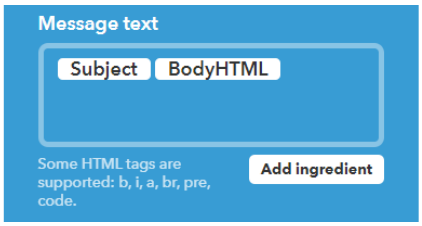




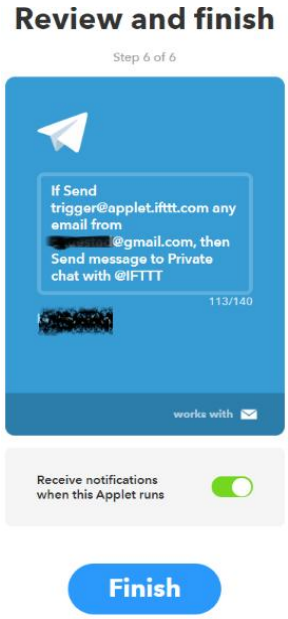
Note: An email can consist of several sections. The email text may be in plaintext or HTML format, or both. *Log4OM produces text in HTML format only*. You have to edit the Message text field to see the email text.



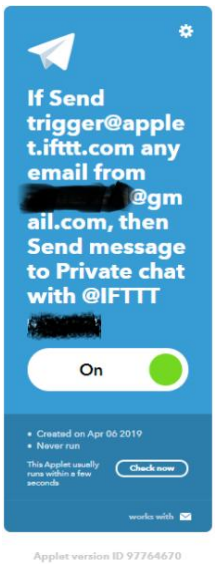
Click **Add ingredient** and edit the Message text field. Delete the **Body** marker and make sure **BodyHTML** is selected.
You do not need to enable Web page preview.



Afterwards, click **Create action**.

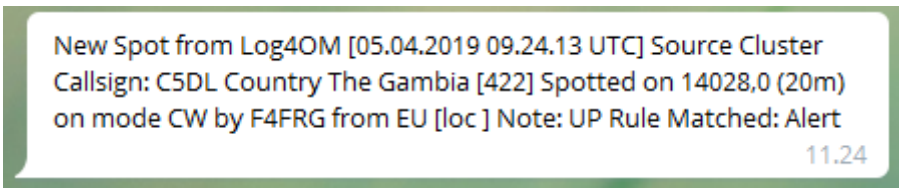


To create your applet, click **Finish.**



Forwarding alerts to IFTTT

Now you have to replace the email destination you used for testing in Log4OM with IFTTT's email receptor *trigger@applet.ifttt.com*.
Any email you send to this address from your email address will be forwarded by IFTTT. You can test by sending an email from your ordinary email program to the IFTTT trigger address.
This is how a spot looks in Telegram:



Cluster Scanner (F10)

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

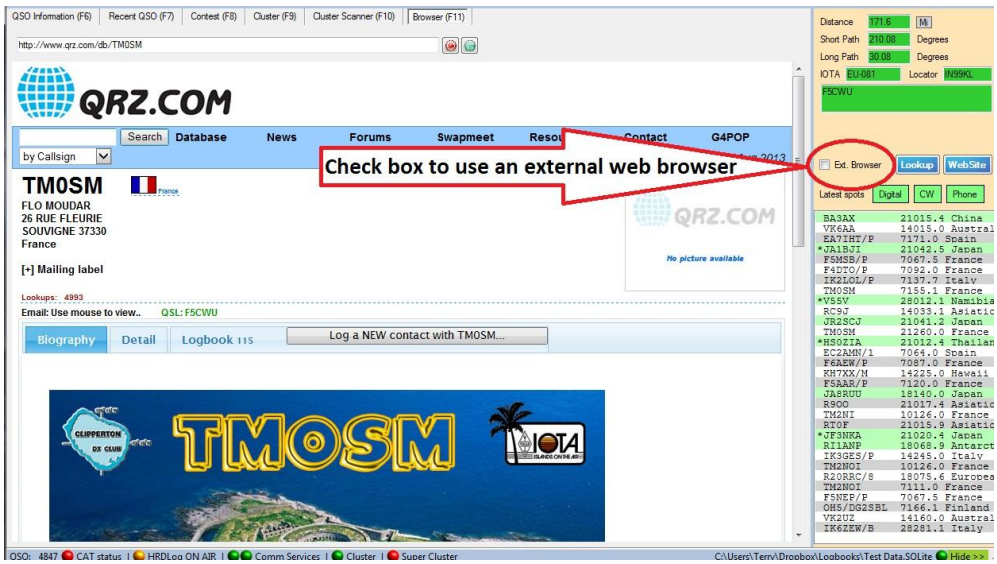
It displays all the stations on the cluster close to the radio's frequency between plus/minus 15 KHz with respect to the selected spot. (Other calls on the frequency indicate that the station is within plus/minus 1 KHz from each other).

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

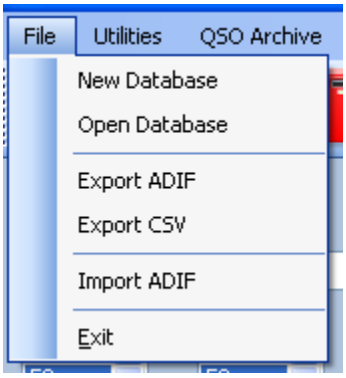
Browser (F11)

Clicking on a cluster spot and then clicking the 'Lookup' botton 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

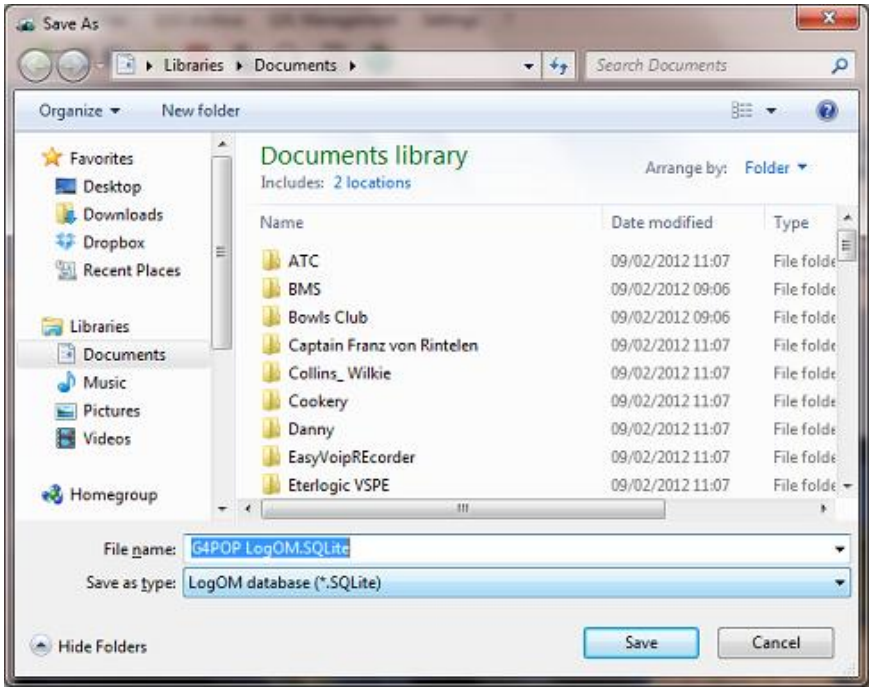


File

New Database

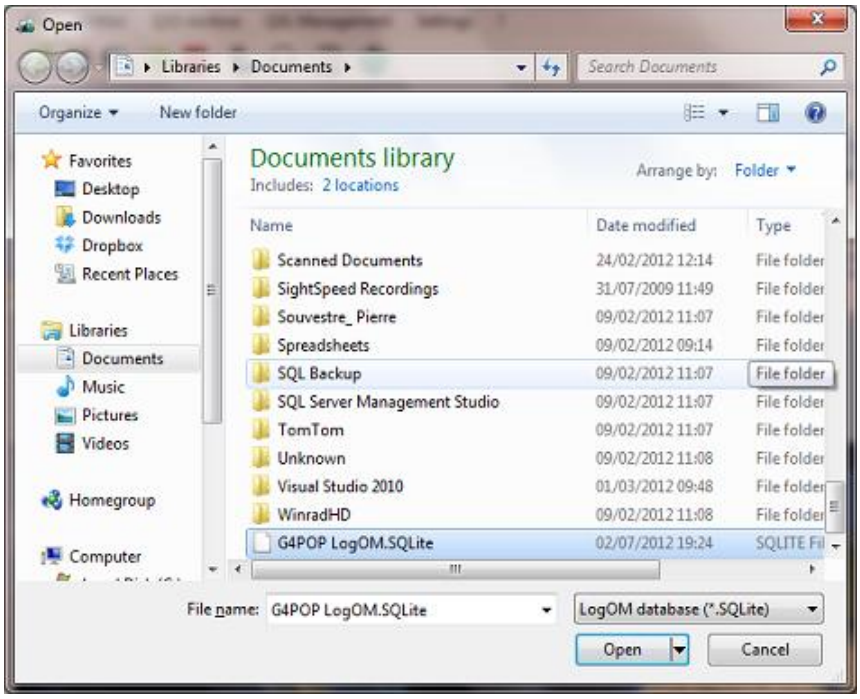
The user may have as many databases (Logbooks) as required e.g. Main call sign, Contest call sign or Special Event call sign etc.

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



Open Database

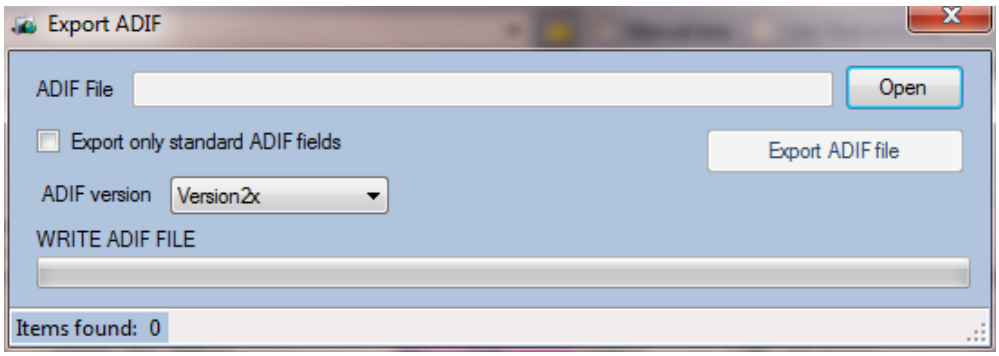
Select a database from the list and click OK.



Export ADIF

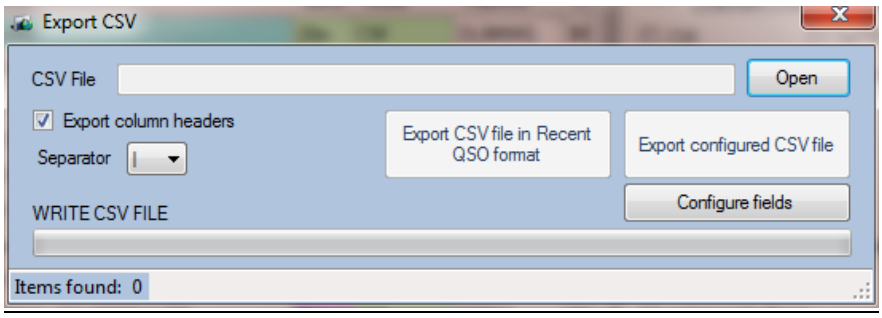
This feature is for exporting **ALL** of the QSOs from the Logbook as an ADIF file. If only part of the Log database is required for exporting go to the QSL Management feature. (See p 65)

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



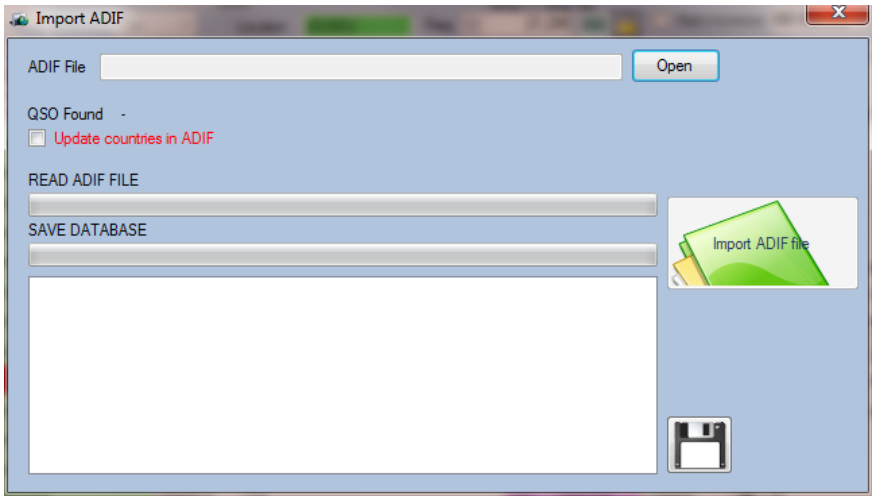
Export CSV

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



Import ADIF

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



Menu Bar and Icon Bar

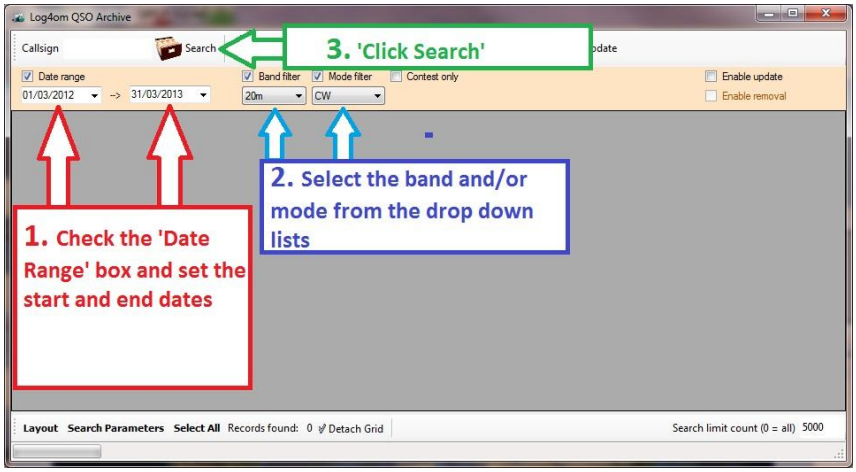
Menu Bar and Icon Bar

QSO Manager

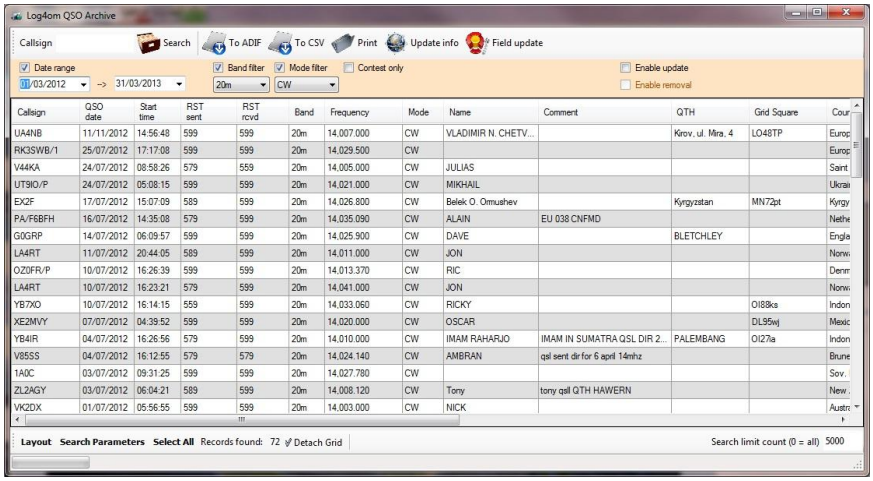
Bulk Editing.

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.**

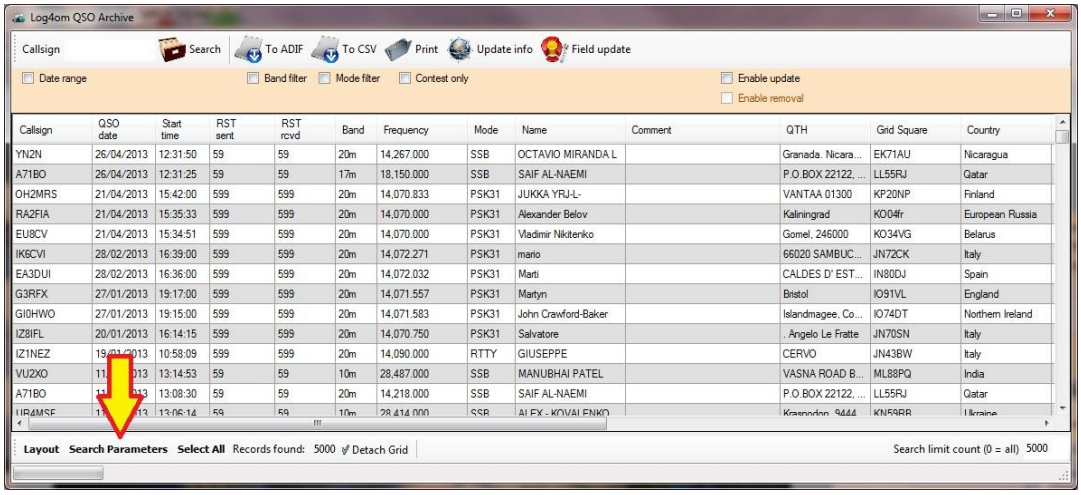
Log4OM provides pre-set searches in the main window, below is shown an example of searching the logbook by date range, band and mode.



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



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



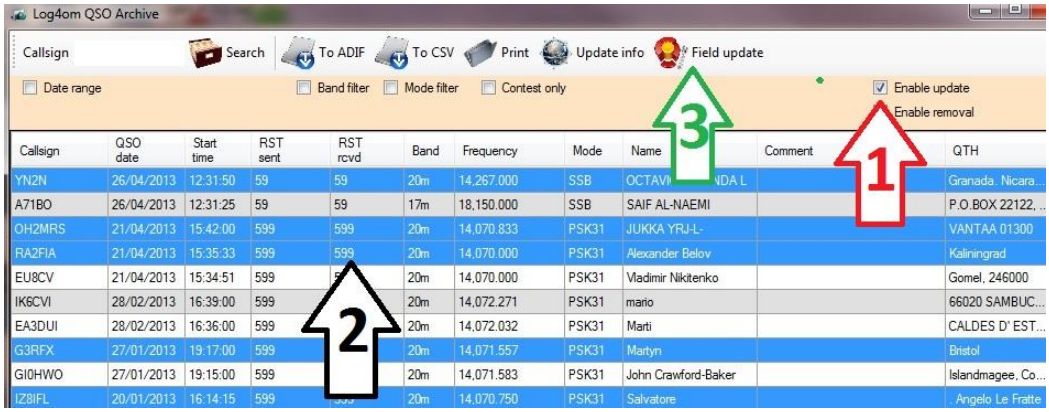
Click on the ‘Search Parameters’ button at the bottom left of the screen shown above, to filter the QSOs requiring editing.

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.

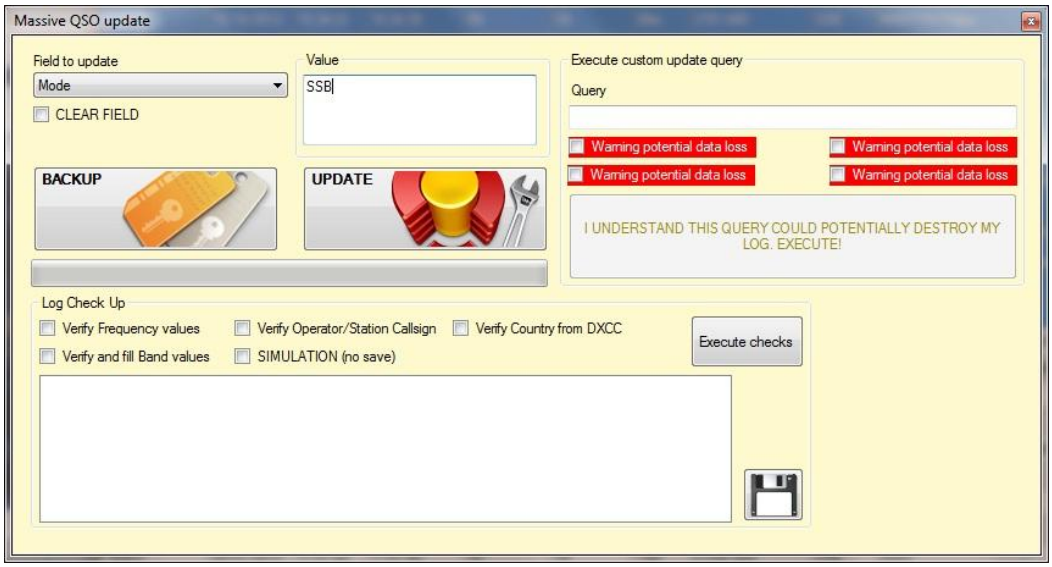
Click the  icon and then the  and then. Then click ‘Search’, next to the Call sign entry field in the top row.

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.



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



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

<u>To empty the ADIF field.</u>

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.

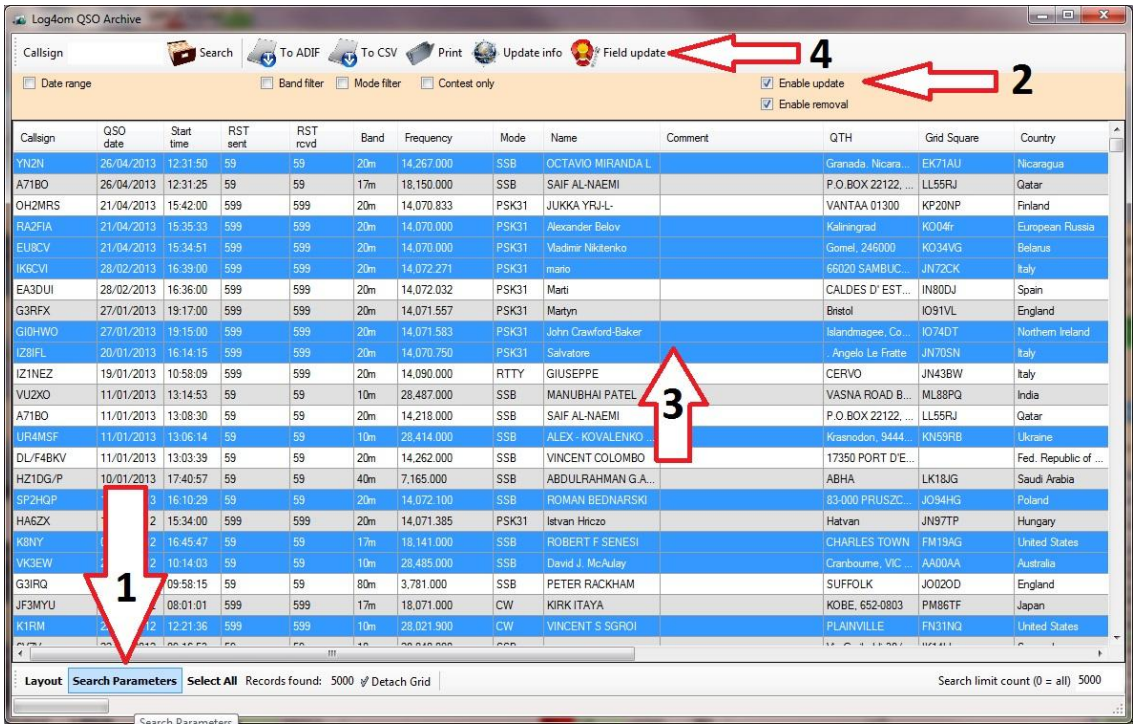
Log Checks

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 also provided to verify and update data for operator, empty frequency fields, Country, Band values and QSO distances and bearings. The user may also update the QSO information using the 'Update info' button to bulk update QSO's from on line lookup facilities like QRZ and HamQTH

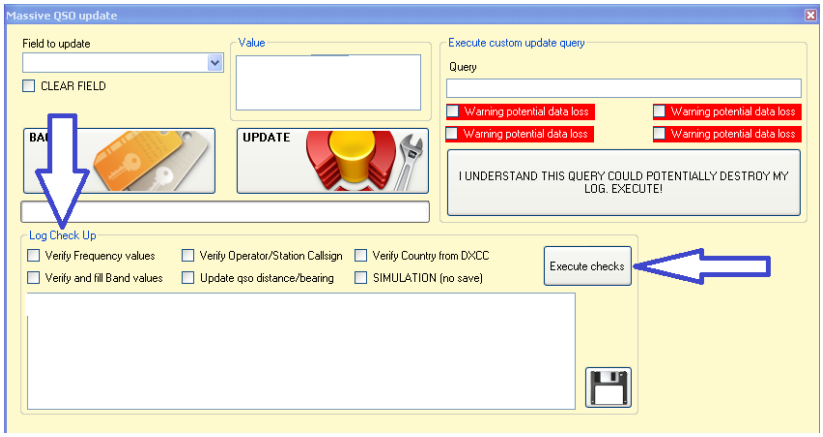


1. Check/Tick the ‘Enable update’ box.
2. Highlight the QSOs for updating/verifying.
3. Click on ‘Field Update’.

Alternatively use the 'Update info' button on the tool bar for online updates

In the resulting window below:

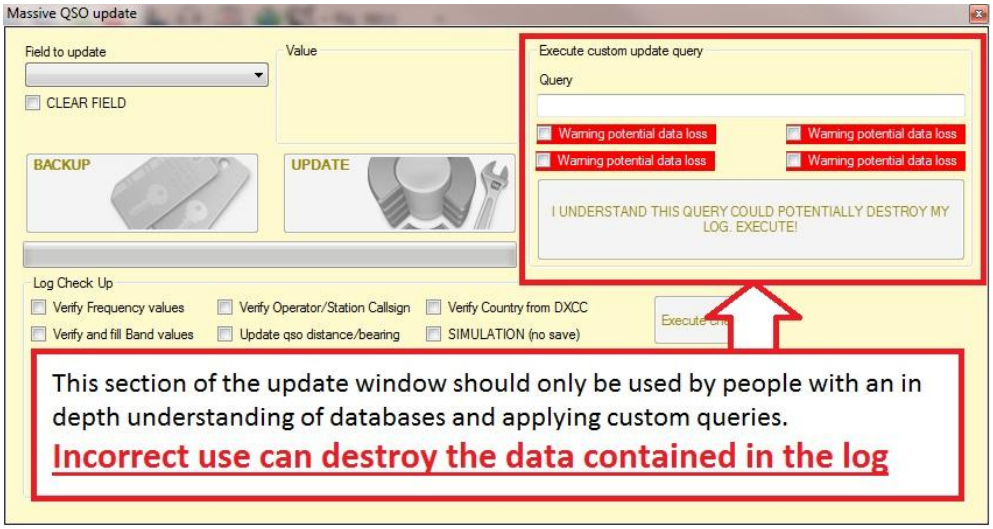
1. Check/Tick the required boxes in the ‘Log Check up’ area of the ‘Massive QSO Update’ window.
2. Click on the ‘Execute Checks’ button.
3. Close the ‘Massive Update’ window.



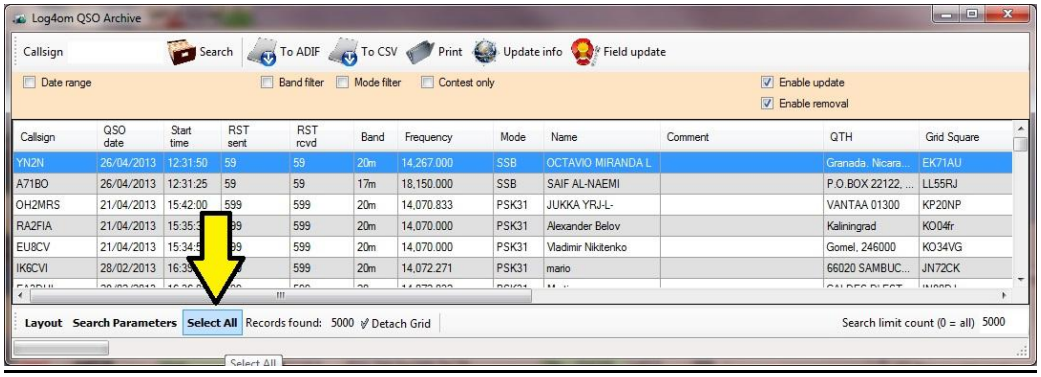
4. Refresh the ‘QSO Archive Manager’ screen in order to view the results.

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

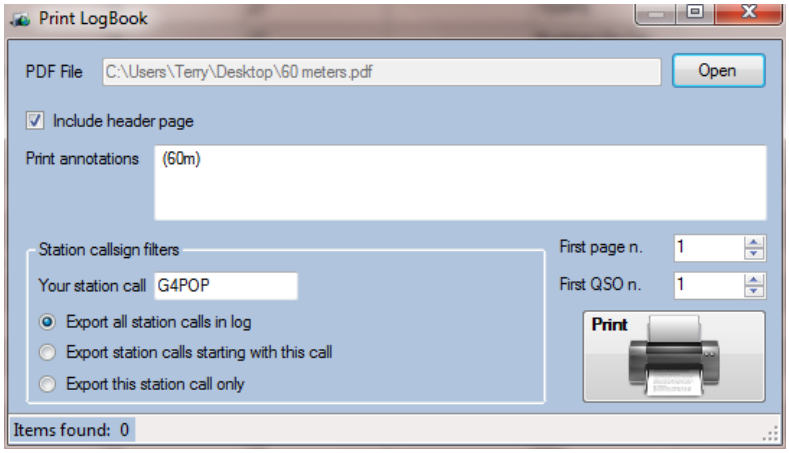
- In the QSO archive window changing the layout and column widths only applies to the screen view, not to the 'Print' function.

- The 'Print' format is not user configurable.

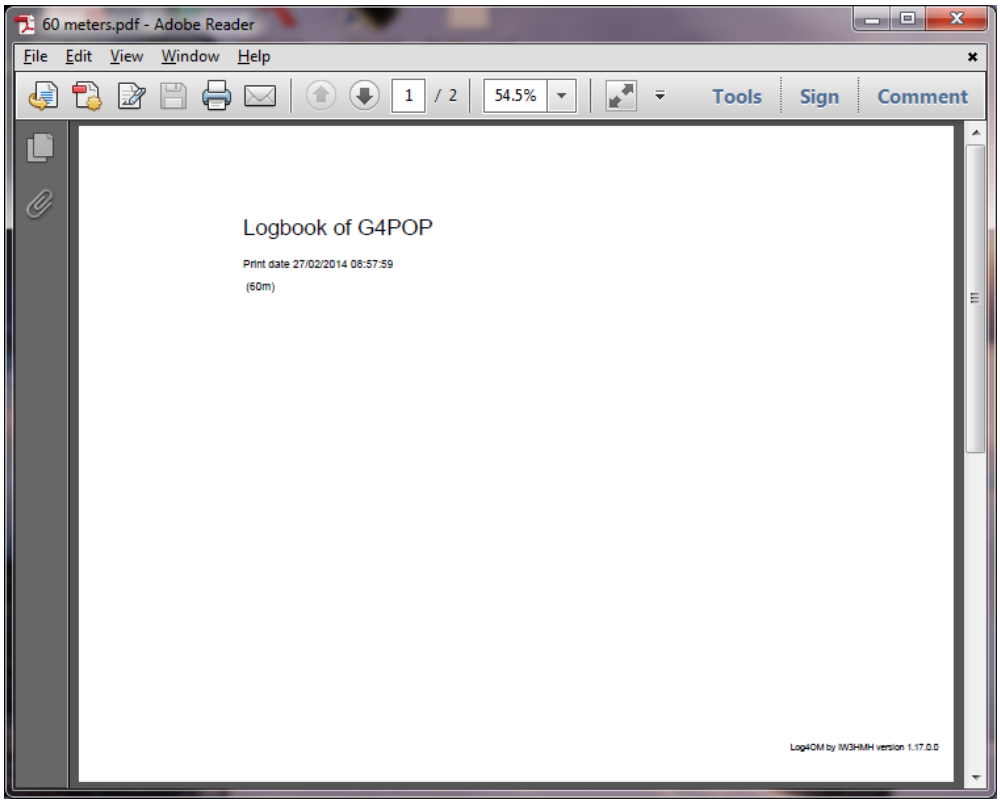
Using the 'Print' facility

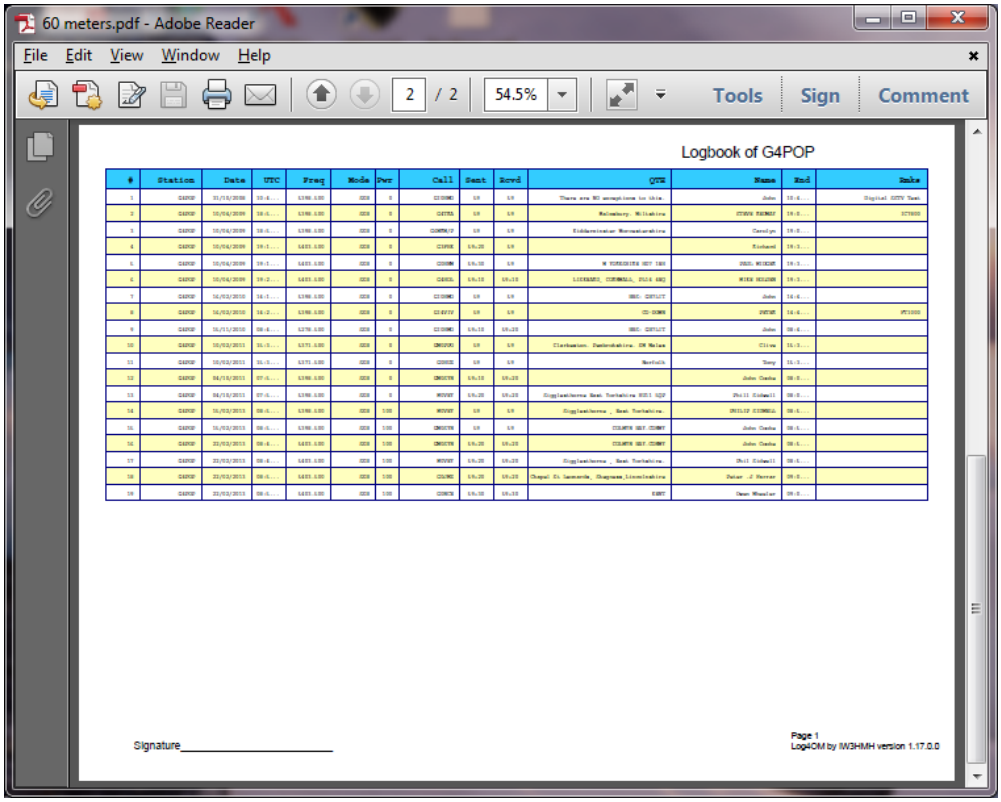
As stated in the notes the fields and columns are not configurable using this facility but the preset format will be adequate for most users

- 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.

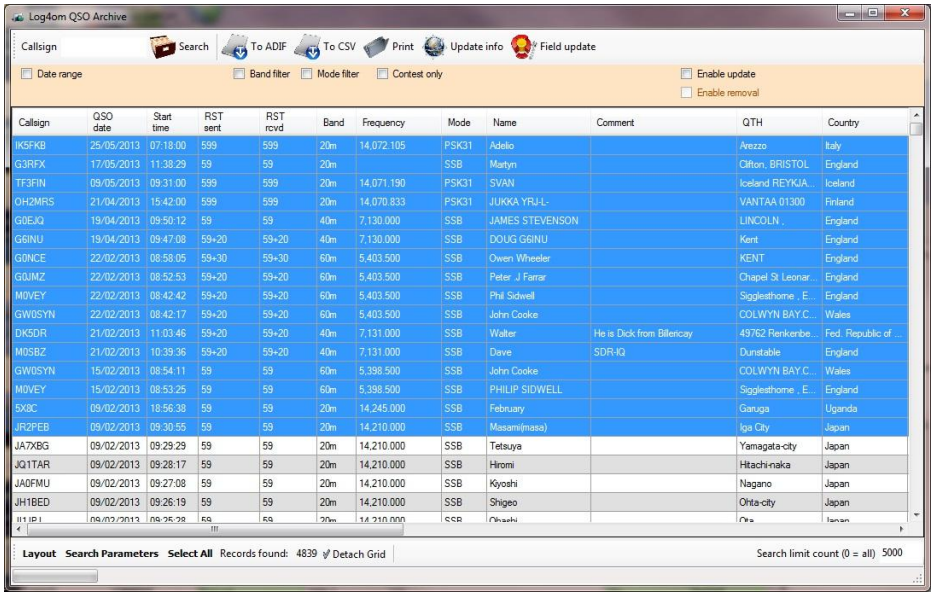




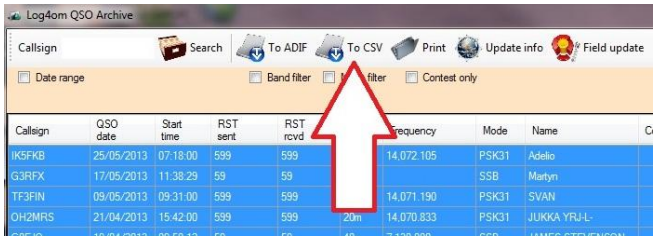
Using the 'To CSV' facility' to print the logbook

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

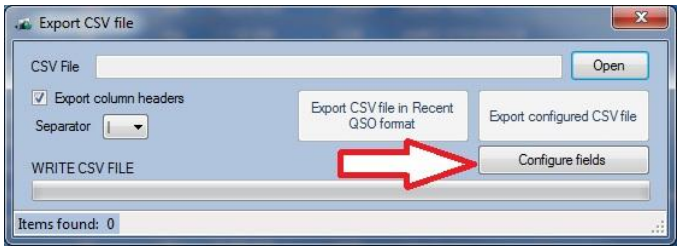
2. Highlight the QSO's for printing



3. Click the 'To CSV' button

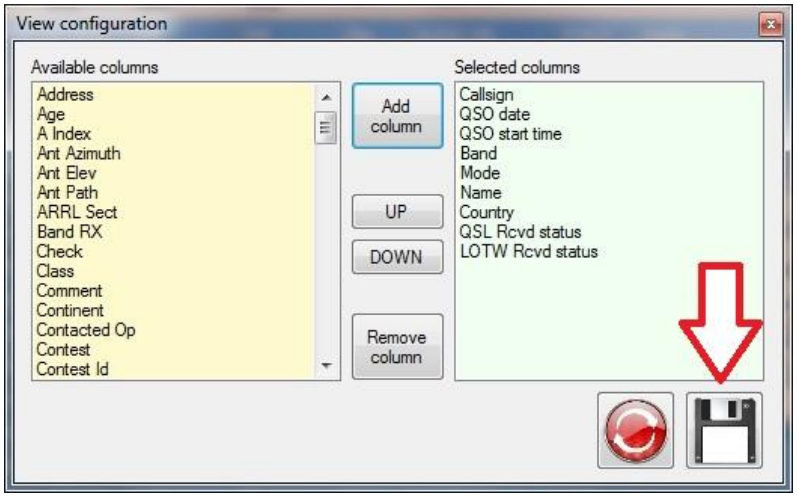


4. Click 'Configure Fields' button

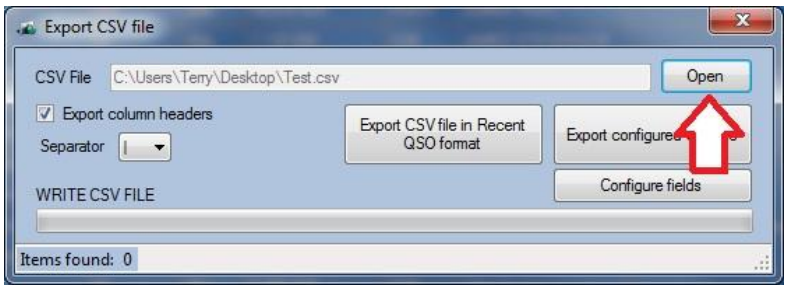


5. Select the fields to be printed and the order in which you need them displayed

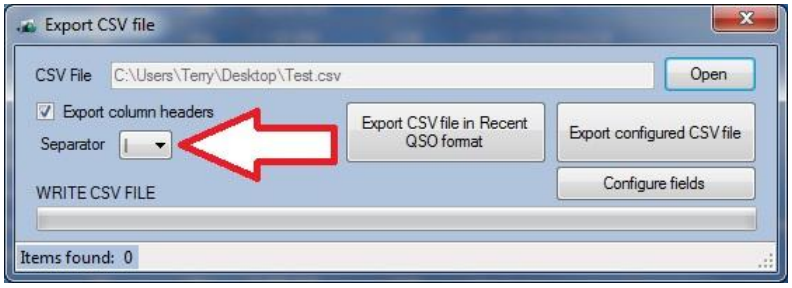
6. Save the configuration by clicking the floppy disk save button.



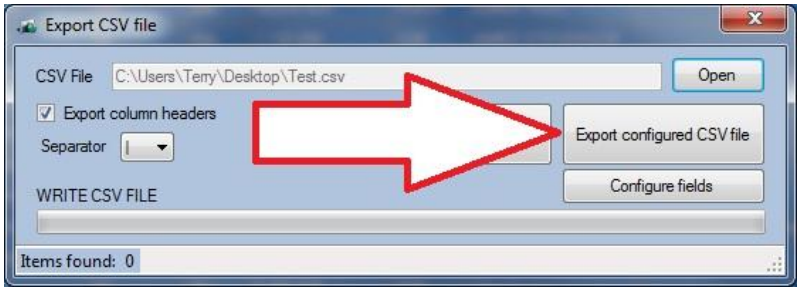
7. Click the 'Open' button and select a location and name for the file



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

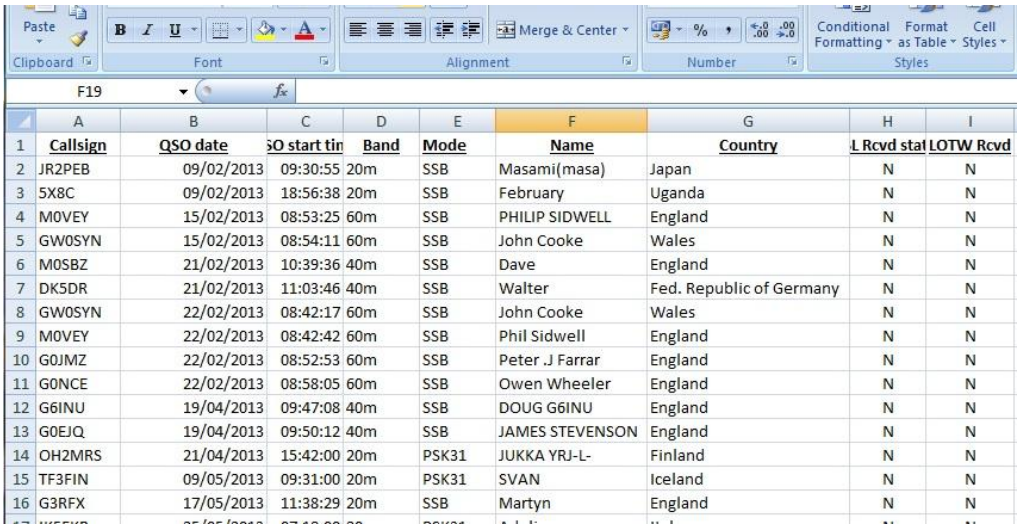


9. Click the 'Export configured CSV file' button



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.



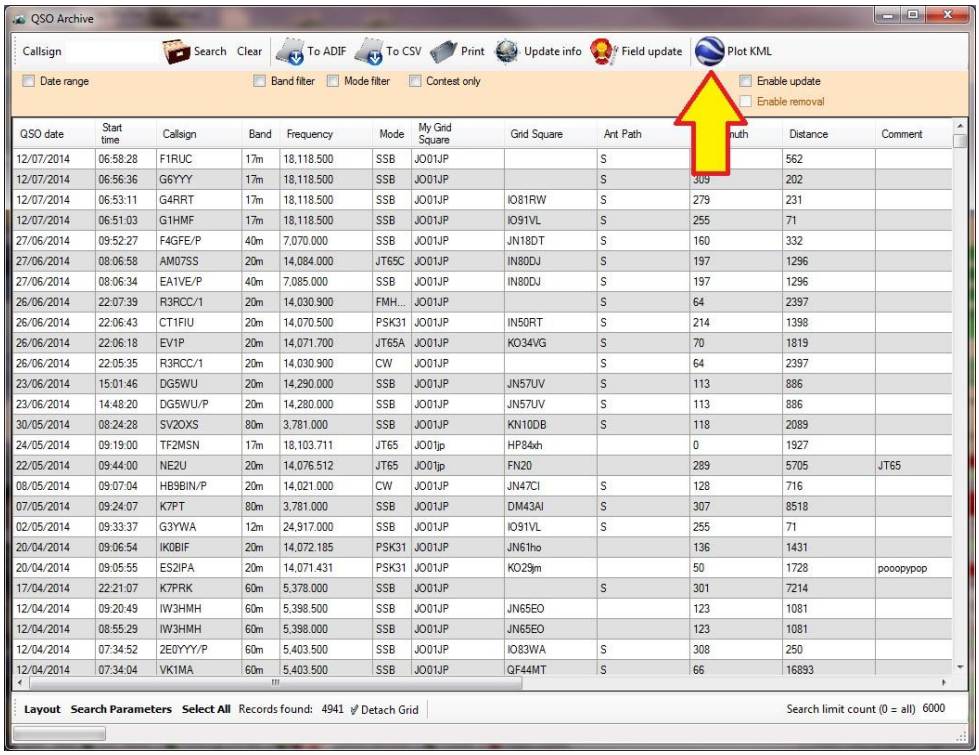
	A	B	C	D	E	F	G	H	I
1	Callsign	QSO date	SO start tin	Band	Mode	Name	Country	L Rcvd stat	LOTW Rcvd
2	JR2PEB	09/02/2013	09:30:55	20m	SSB	Masami(masa)	Japan	N	N
3	5X8C	09/02/2013	18:56:38	20m	SSB	February	Uganda	N	N
4	M0VEY	15/02/2013	08:53:25	60m	SSB	PHILIP SIDWELL	England	N	N
5	GW0SYN	15/02/2013	08:54:11	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

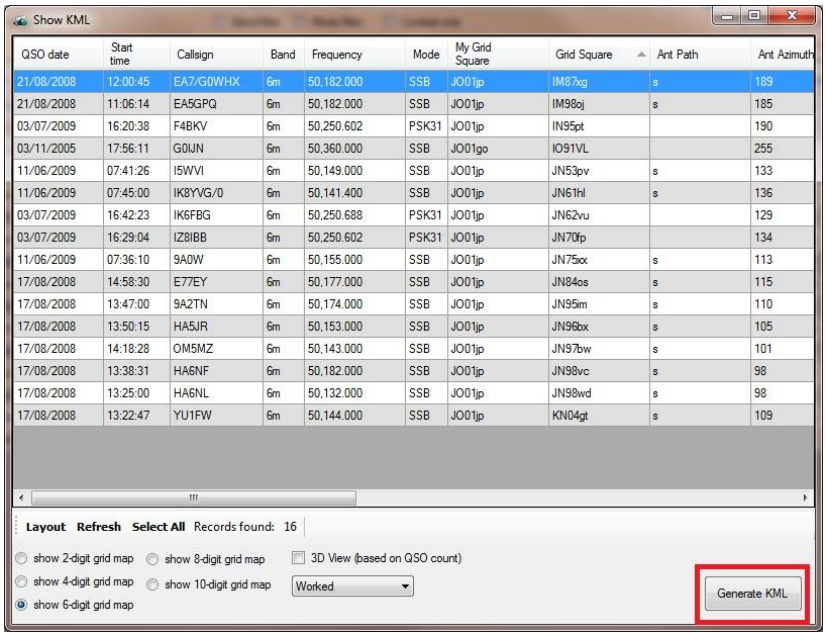
The QSO manager provides plotting of grid squares (Locators) to Google Earth providing the Google Earth software is installed on the users computer.

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



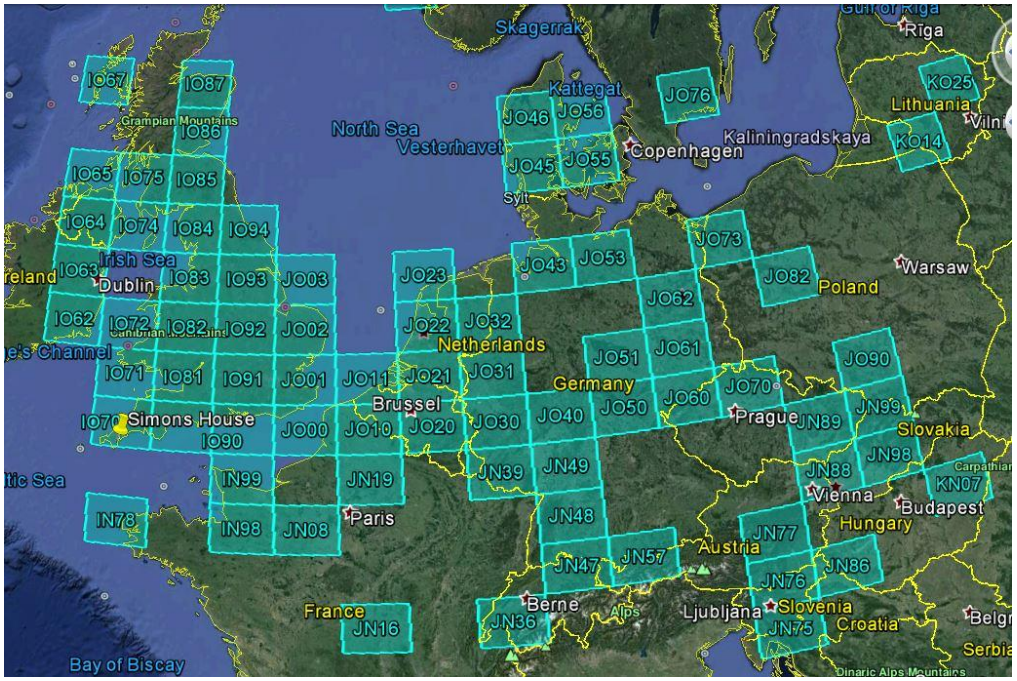
QSO date	Start time	Callsign	Band	Frequency	Mode	My Grid Square	Grid Square	Ant Path	Distance	Comment
12/07/2014	06:58:28	F1RUC	17m	18,118.500	SSB	JO01JP		S	562	
12/07/2014	06:56:36	G6YYY	17m	18,118.500	SSB	JO01JP		S	309	202
12/07/2014	06:53:11	G4RRT	17m	18,118.500	SSB	JO01JP	IO81RW	S	279	231
12/07/2014	06:51:03	G1HMF	17m	18,118.500	SSB	JO01JP	IO91VL	S	255	71
27/06/2014	09:52:27	F4GFE/P	40m	7,070.000	SSB	JO01JP	JN18DT	S	160	332
27/06/2014	08:06:58	AM07SS	20m	14,084.000	JT65C	JO01JP	IN80DJ	S	197	1296
27/06/2014	08:06:34	EA1VE/P	40m	7,085.000	SSB	JO01JP	IN80DJ	S	197	1296
26/06/2014	22:07:39	R3RCC/1	20m	14,030.900	FMH...	JO01JP		S	64	2397
26/06/2014	22:06:43	CT1FIU	20m	14,070.500	PSK31	JO01JP	IN50RT	S	214	1398
26/06/2014	22:06:18	EV1P	20m	14,071.700	JT65A	JO01JP	KO34VG	S	70	1819
26/06/2014	22:05:35	R3RCC/1	20m	14,030.900	CW	JO01JP		S	64	2397
23/06/2014	15:01:46	DG5WU	20m	14,290.000	SSB	JO01JP	JN57UV	S	113	886
23/06/2014	14:48:20	DG5WU/P	20m	14,280.000	SSB	JO01JP	JN57UV	S	113	886
30/05/2014	08:24:28	SV2OXS	80m	3,781.000	SSB	JO01JP	KN10DB	S	118	2089
24/05/2014	09:19:00	TF2MSN	17m	18,103.711	JT65	JO01jp	HP84xh		0	1927
22/05/2014	09:44:00	NE2U	20m	14,076.512	JT65	JO01jp	FN20		289	5705 JT65
08/05/2014	09:07:04	HB9BIN/P	20m	14,021.000	CW	JO01JP	JN47CI	S	128	716
07/05/2014	09:24:07	K7PT	80m	3,781.000	SSB	JO01JP	DM43AI	S	307	8518
02/05/2014	09:33:37	G3YWA	12m	24,917.000	SSB	JO01JP	IO91VL	S	255	71
20/04/2014	09:06:54	IK0BIF	20m	14,072.185	PSK31	JO01JP	JN61ho		136	1431
20/04/2014	09:05:55	ES2IPA	20m	14,071.431	PSK31	JO01JP	KO29jm		50	1728 pooopypop
17/04/2014	22:21:07	K7PRK	60m	5,378.000	SSB	JO01JP		S	301	7214
12/04/2014	09:20:49	IW3HMH	60m	5,398.500	SSB	JO01JP	JN65EO		123	1081
12/04/2014	08:55:29	IW3HMH	60m	5,398.000	SSB	JO01JP	JN65EO		123	1081
12/04/2014	07:34:52	2E0YYY/P	60m	5,403.500	SSB	JO01JP	IO83WA	S	308	250
12/04/2014	07:34:04	VK1MA	60m	5,403.500	SSB	JO01JP	QF44MT	S	66	16893

2. Click the "Plot KML" button



QSO date	Start time	Callsign	Band	Frequency	Mode	My Grid Square	Grid Square	Ant Path	Ant Azimuth
21/08/2008	12:00:45	EA7/G0WHX	6m	50,182.000	SSB	JO01jp	IM87xg	s	189
21/08/2008	11:06:14	EA5GPQ	6m	50,182.000	SSB	JO01jp	IM98oj	s	185
03/07/2009	16:20:38	F4BKV	6m	50,250.602	PSK31	JO01jp	IN95pt		190
03/11/2005	17:56:11	G0IJN	6m	50,360.000	SSB	JO01go	IO91VL		255
11/06/2009	07:41:26	I5WVI	6m	50,149.000	SSB	JO01jp	JN53pv	s	133
11/06/2009	07:45:00	IK8YVG/0	6m	50,141.400	SSB	JO01jp	JN61hl	s	136
03/07/2009	16:42:23	IK6FBG	6m	50,250.688	PSK31	JO01jp	JN62vu		129
03/07/2009	16:29:04	IZ8IBB	6m	50,250.602	PSK31	JO01jp	JN70fp		134
11/06/2009	07:36:10	9A0W	6m	50,155.000	SSB	JO01jp	JN75xx	s	113
17/08/2008	14:58:30	E77EY	6m	50,177.000	SSB	JO01jp	JN84os	s	115
17/08/2008	13:47:00	9A2TN	6m	50,174.000	SSB	JO01jp	JN95im	s	110
17/08/2008	13:50:15	HA5JR	6m	50,153.000	SSB	JO01jp	JN96bx	s	105
17/08/2008	14:18:28	OM5MZ	6m	50,143.000	SSB	JO01jp	JN97bw	s	101
17/08/2008	13:38:31	HA6NF	6m	50,182.000	SSB	JO01jp	JN98vc	s	98
17/08/2008	13:25:00	HA6NL	6m	50,132.000	SSB	JO01jp	JN98wd	s	98
17/08/2008	13:22:47	YU1FW	6m	50,144.000	SSB	JO01jp	KN04gt	s	109

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


Skagerrak
Kattegat
North Sea
Vesterhavet
Copenhagen
Kaliningradskaya
Lithuania
Riga
Gulf of Riga
Grampian Mountains
Irish Sea
Dublin
Sylt
Warsaw
Poland
Netherlands
Germany
Brussel
Prague
Slovakia
Simons House
Paris
Vienna
Budapest
Hungary
Austria
Berne
Ljubljana
Slovenia
Croatia
France
Alps
Bay of Biscay
Dinaric Alps Mountains
IO67
IO87
IO86
IO65
IO75
IO85
IO64
IO74
IO84
IO94
IO63
IO83
IO93
JO03
IO62
IO72
IO82
JO02
IO71
IO81
IO91
JO01
IO70
IO90
JO00
IN99
JN19
IN78
IN98
JN08
JN16
JO76
JO46
JO56
JO45
JO55
JO73
JO43
JO53
JO82
JO23
JO62
JO22
JO32
JO51
JO61
JO90
JO11
JO21
JO31
JO60
JO70
JO10
JO20
JO30
JO40
JO50
JN89
JN99
JN98
JN88
KN07
JN39
JN49
JN48
JN77
JN47
JN57
JN86
JN76
JN36
JN75
KO25
KO14

Menu Bar and Icon Bar

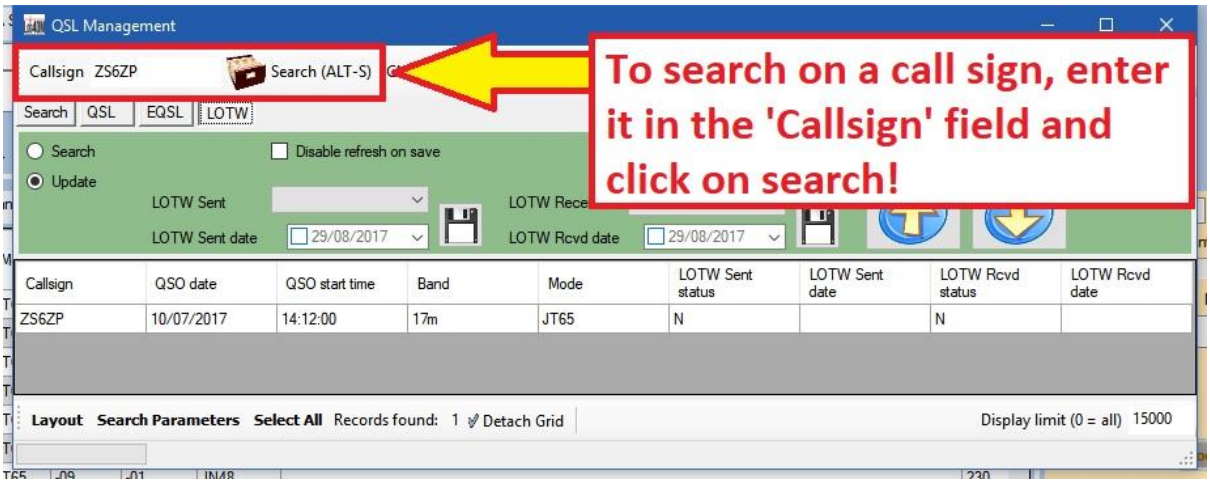
QSL Tools

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.

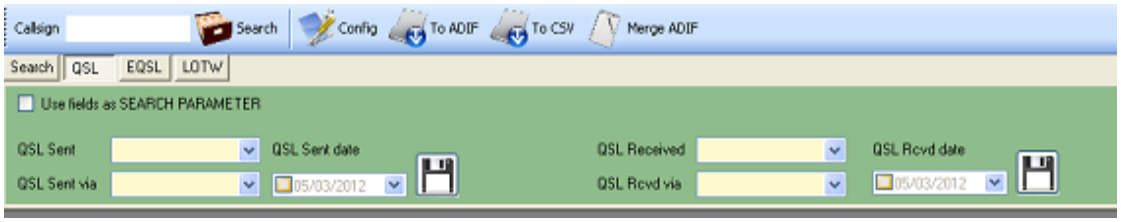
PLEASE NOTE

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 ne merged with existing logbook data on the main computer.

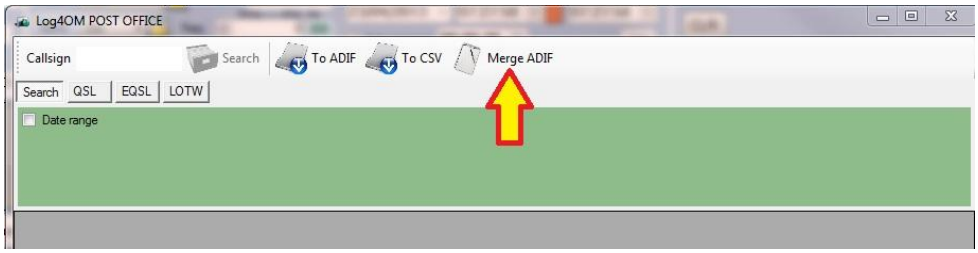
Merging data is different to an import – The data to be merged is matched to the existing logbook data and when a QSO with matching *Date, Time, Call sign, Band, Frequency and mode* is found only information for that QSO which is different is changed/updated.

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.

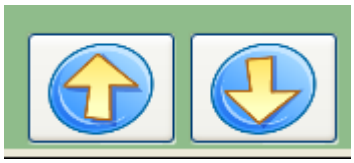


Step 4.
Click 'Open' and the file will be merged with the main logbook data only updating the data with any modified information contained on the ADIF file exported from the secondary computer.

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.

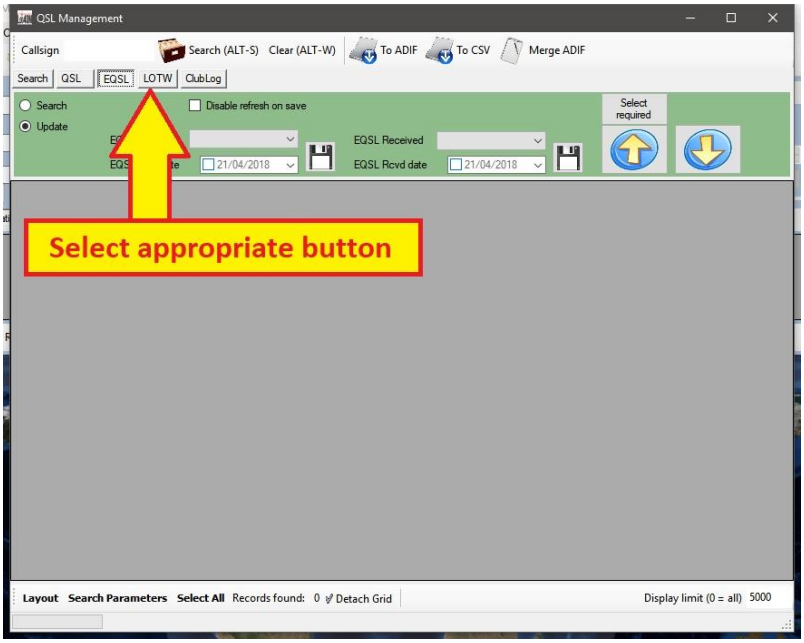
EQSL, LOTW & Clublog UPLOAD AND DOWNLOAD



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 ……

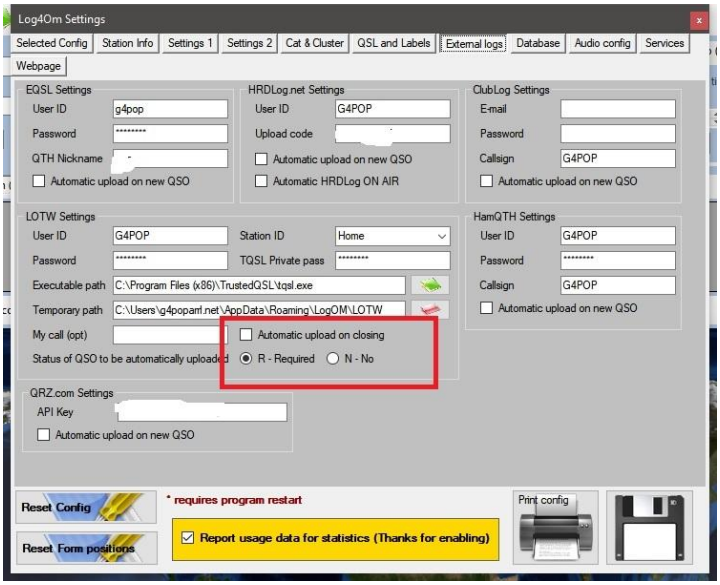
1. Click on the eQSL or LOTW button - The user is presented with the following choices ……

a. **Without entering a call sign in the 'Callsign' field click the 'Search' button at the top, or press Enter/Return on the keyboard, to display all QSO's in the logbook** in descending date order.

b. Use the 'Search parameters' tool **at the bottom of the window**- With this tool you can search and select the QSO's required by any field . **Then click the 'Search' button at the top, or press Enter/Return on the keyboard, to display the filtered QSO's**

C. Use any of the preset search facilities presented in the tool bar with the green background

E. Use the 'Select required' button above the upload arrow - This will present a list of QSO's which are either marked R - Required or N - no, according to the QSL status of the QSO selected by the user preference set in the Log4OM Options/External logbooks tab as shown below.

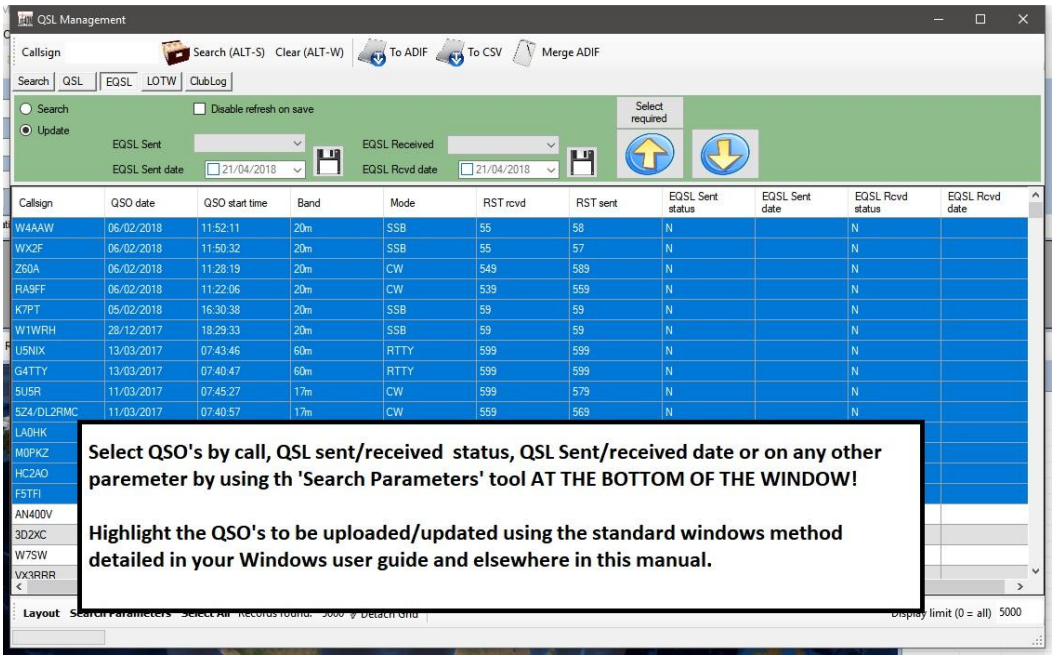


NOTE - It is possible to set an automatic upload of QSO's to LOTW for activation when Log4OM is closed

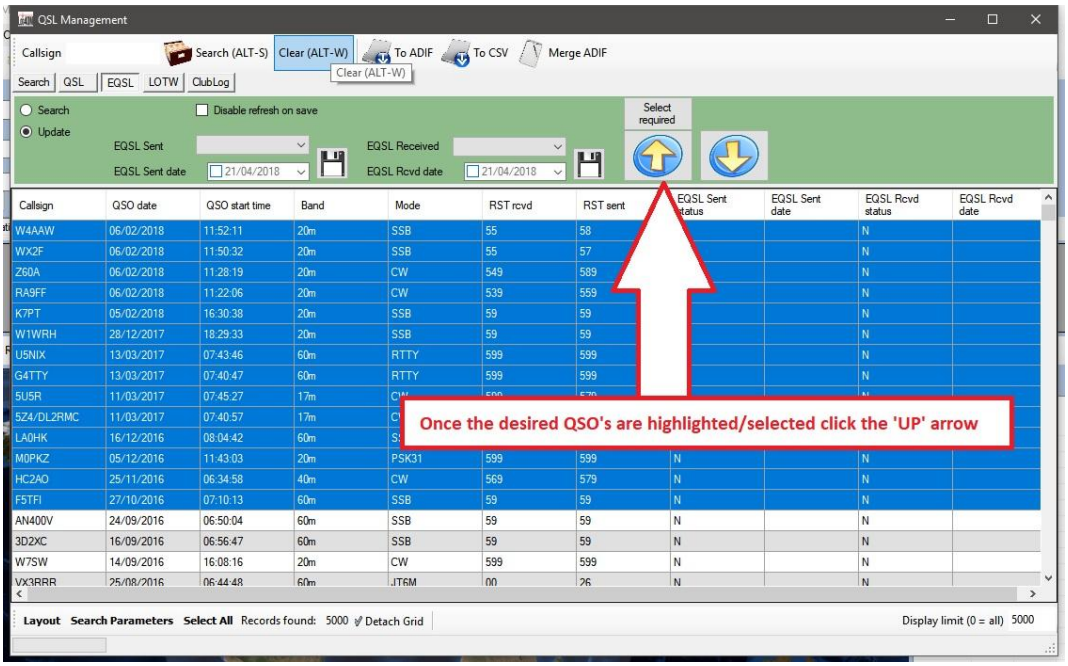
When a list of QSO's is displayed by using either method A, B, C or E above..

a. Highlight the QSO's required for uploading.(Using the standard Windows method as per the Windows user guide and elsewhere in this manual)
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

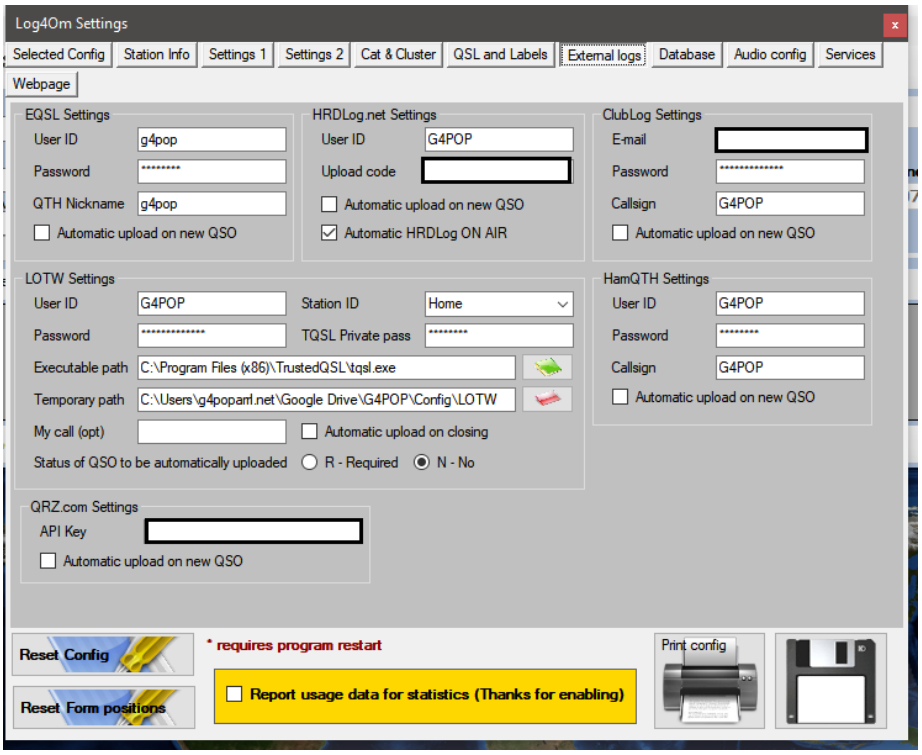


Upload



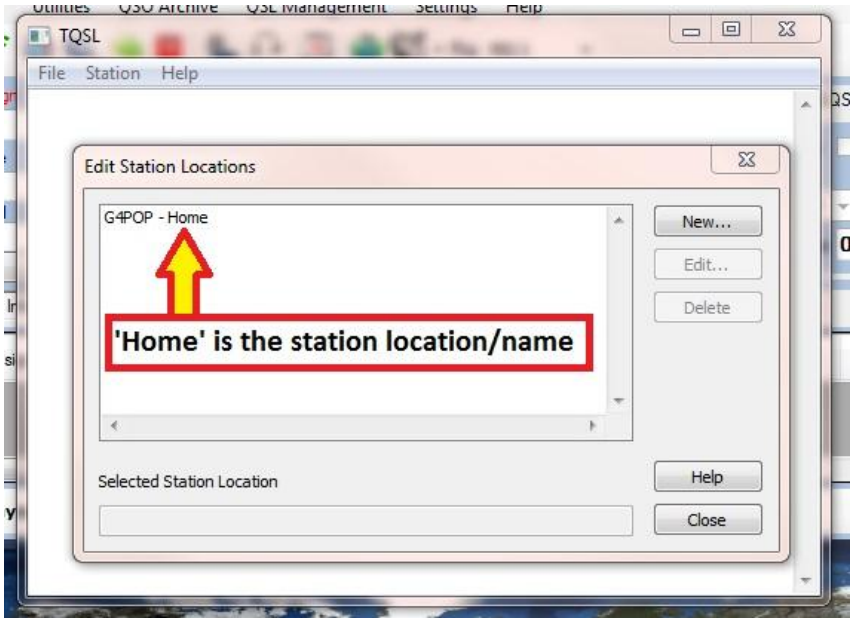
LOTW Upload

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



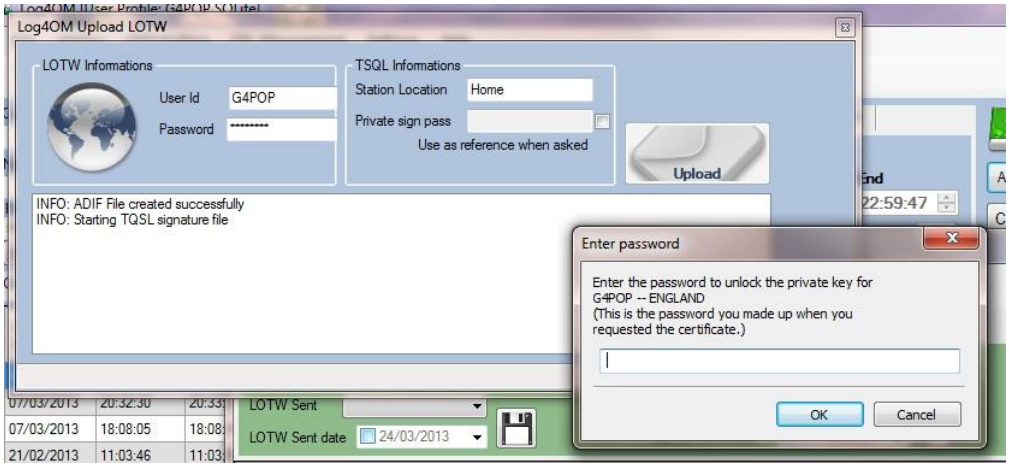
Important note

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.

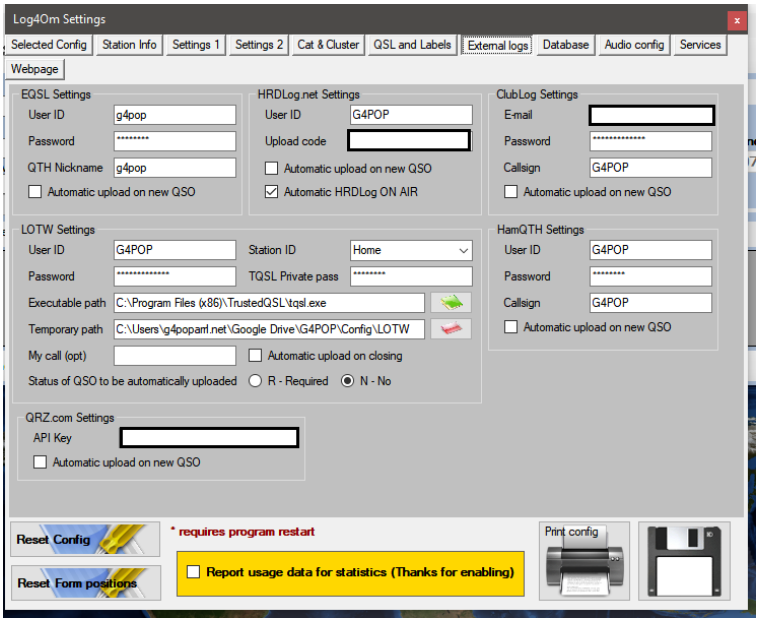
Important note:
For EQSL & LOTW upload and download to function correctly the user must have entered his correct user names and passwords in the 'Option' menu.

LOTW Download

The LOTW download does not rely on the Tqsl program it uses the same user name and password that is used when logging on to the LOTW web site.

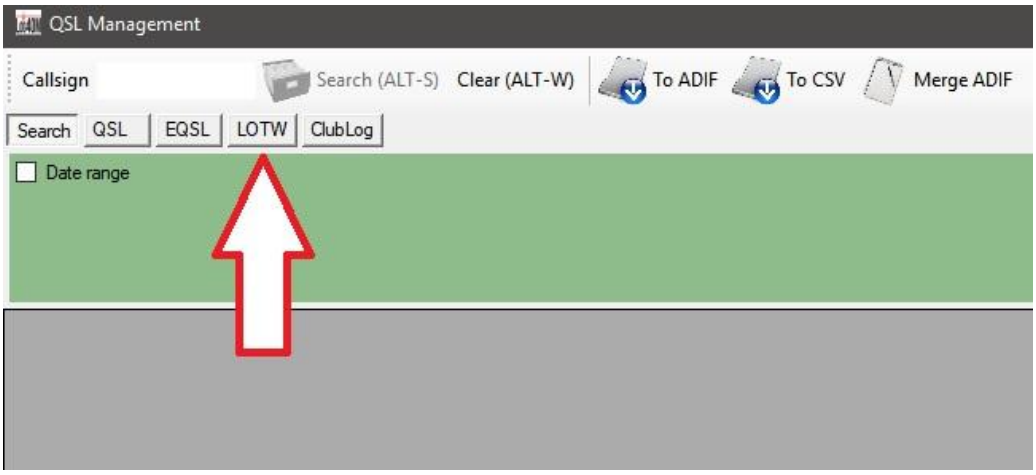
Please ensure that the LOTW user name and password do not contain any special characters e.g. !"£$%^&*()_+{}@~><?[];# because the LOTW download API will reject the logon if these characters are used.

Enter the LOTW user name and password into the Log4OM Options/external logs LOTW section before attempting an LOTW download - Save the settings by clicking the floppy disk icon at the lower right corner of the Options window.

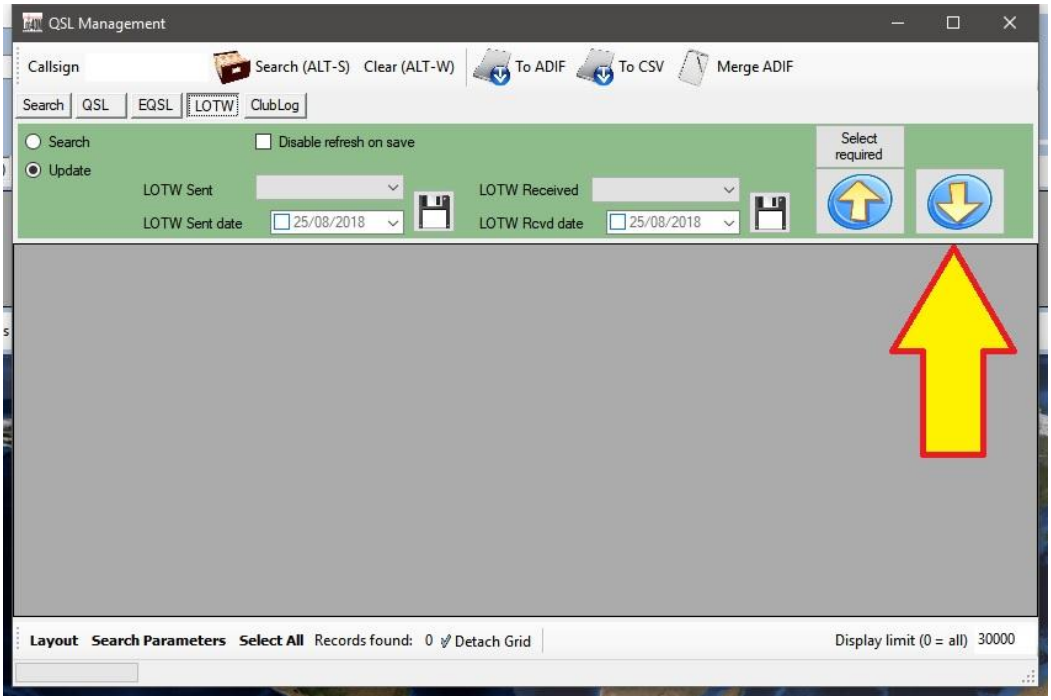


Download

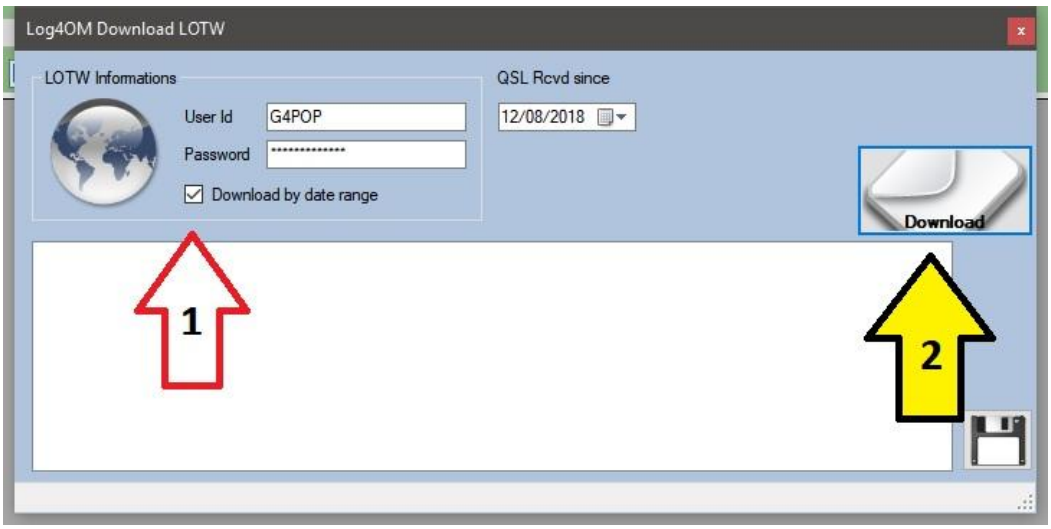
In the QSL Tools/QSL management window select the LOTW button as below.



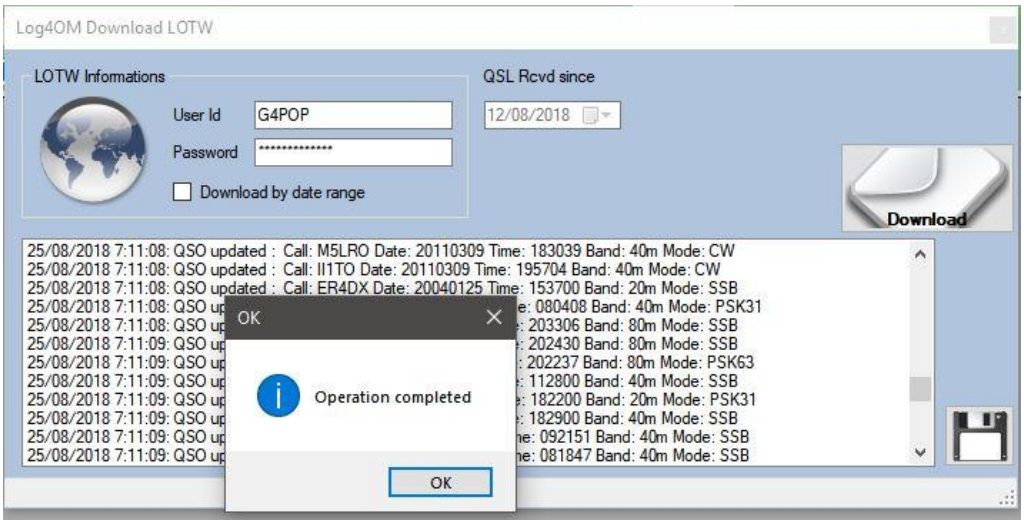
Click on the download arrow indicated below.



In the resulting window either select 'Download by date range' to download from a selected date or leave the box, item 2 below, unchecked to download all entries.

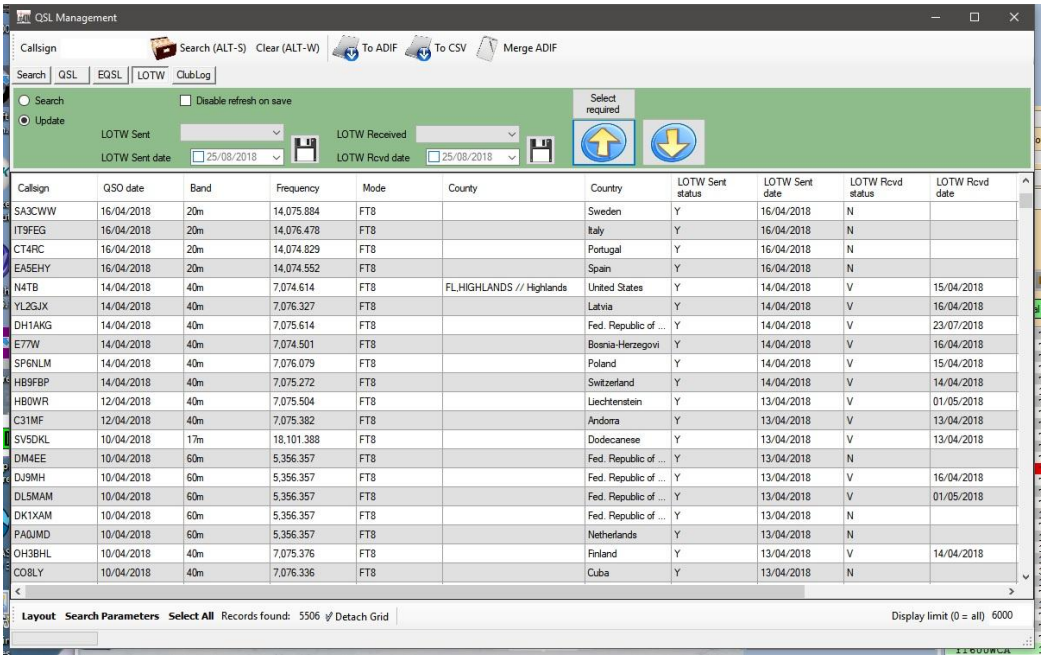


Click the 'Download' button marked 2 above, when the operation is completed a message will apear as below.



Click OK and then close the download window.

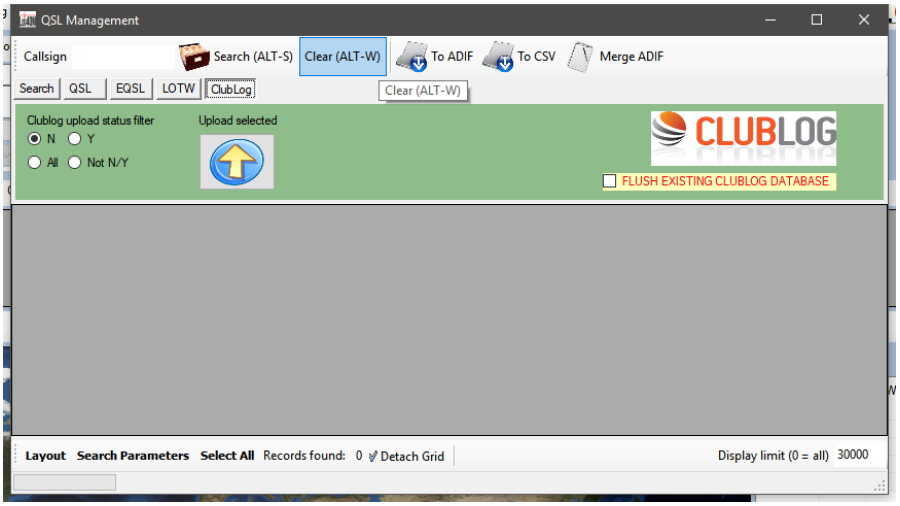
The main QSL management window will refresh and display the LOTW received confirmations and the dates they were confirmed as below.



Callsign	QSO date	Band	Frequency	Mode	County	Country	LOTW Sent status	LOTW Sent date	LOTW Rcvd status	LOTW Rcvd date
SA3CWW	16/04/2018	20m	14,075.884	FT8		Sweden	Y	16/04/2018	N	
IT9FEG	16/04/2018	20m	14,076.478	FT8		Italy	Y	16/04/2018	N	
CT4RC	16/04/2018	20m	14,074.829	FT8		Portugal	Y	16/04/2018	N	
EA5EHY	16/04/2018	20m	14,074.552	FT8		Spain	Y	16/04/2018	N	
N4TB	14/04/2018	40m	7,074.614	FT8	FL,HIGHLANDS // Highlands	United States	Y	14/04/2018	V	15/04/2018
YL2GJX	14/04/2018	40m	7,076.327	FT8		Latvia	Y	14/04/2018	V	16/04/2018
DH1AKG	14/04/2018	40m	7,075.614	FT8		Fed. Republic of ...	Y	14/04/2018	V	23/07/2018
E77W	14/04/2018	40m	7,074.501	FT8		Bosnia-Herzegovi	Y	14/04/2018	V	16/04/2018
SP6NLM	14/04/2018	40m	7,076.079	FT8		Poland	Y	14/04/2018	V	15/04/2018
HB9FBP	14/04/2018	40m	7,075.272	FT8		Switzerland	Y	14/04/2018	V	14/04/2018
HB0WR	12/04/2018	40m	7,075.504	FT8		Liechtenstein	Y	13/04/2018	V	01/05/2018
C31MF	12/04/2018	40m	7,075.382	FT8		Andorra	Y	13/04/2018	V	13/04/2018
SV5DKL	10/04/2018	17m	18,101.388	FT8		Dodecanese	Y	13/04/2018	V	13/04/2018
DM4EE	10/04/2018	60m	5,356.357	FT8		Fed. Republic of ...	Y	13/04/2018	N	
DJ9MH	10/04/2018	60m	5,356.357	FT8		Fed. Republic of ...	Y	13/04/2018	V	16/04/2018
DL5MAM	10/04/2018	60m	5,356.357	FT8		Fed. Republic of ...	Y	13/04/2018	V	01/05/2018
DK1XAM	10/04/2018	60m	5,356.357	FT8		Fed. Republic of ...	Y	13/04/2018	N	
PA0JMD	10/04/2018	60m	5,356.357	FT8		Netherlands	Y	13/04/2018	N	
OH3BHL	10/04/2018	40m	7,075.376	FT8		Finland	Y	13/04/2018	V	14/04/2018
CO8LY	10/04/2018	40m	7,076.336	FT8		Cuba	Y	13/04/2018	N	

CLUBLOG bulk upload of QSO's

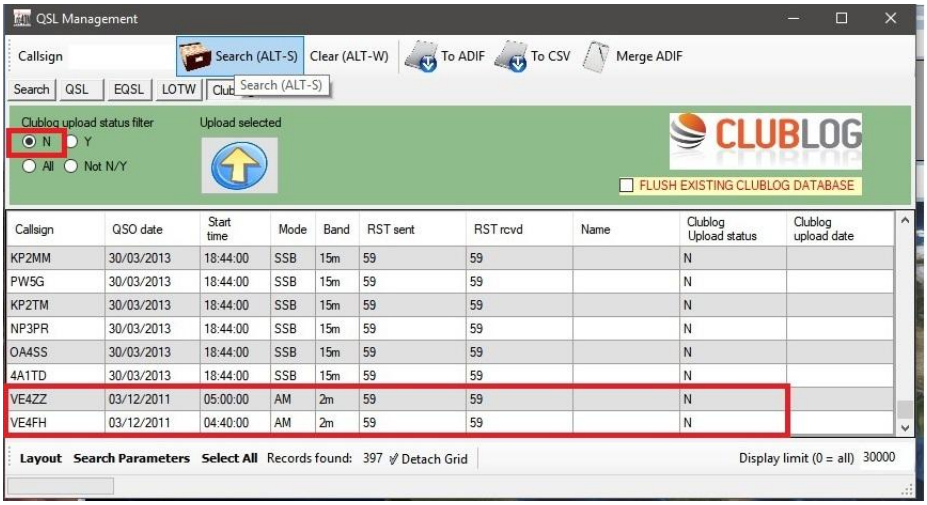
In the QSL Management window select the 'Clublog' tab for bulk uploading of QSO's to the Clublog database. *(Please note there is not an automatic download facility provided by Clublog at the time of writing)*



Select the QSO's to be uploaded by using one of the filters provided or inserting a call sign in the 'Callsign' field at the top left hand corner followed by clickin the'Search' button at the top of the window.

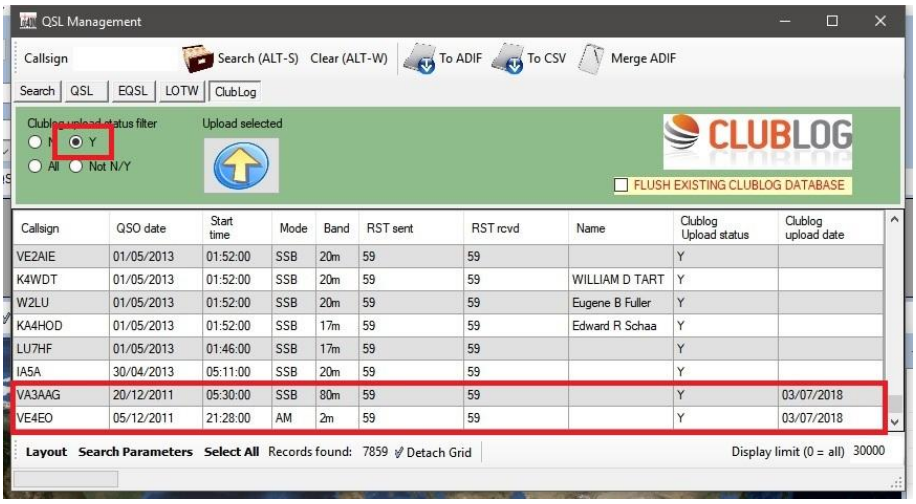
The filters make QSO selection extremely easy and function as follows:

'N' button selected - After clicking the 'Search' button this displays all QSO's that are marked N (No) in the 'Clublog Upload Status' field



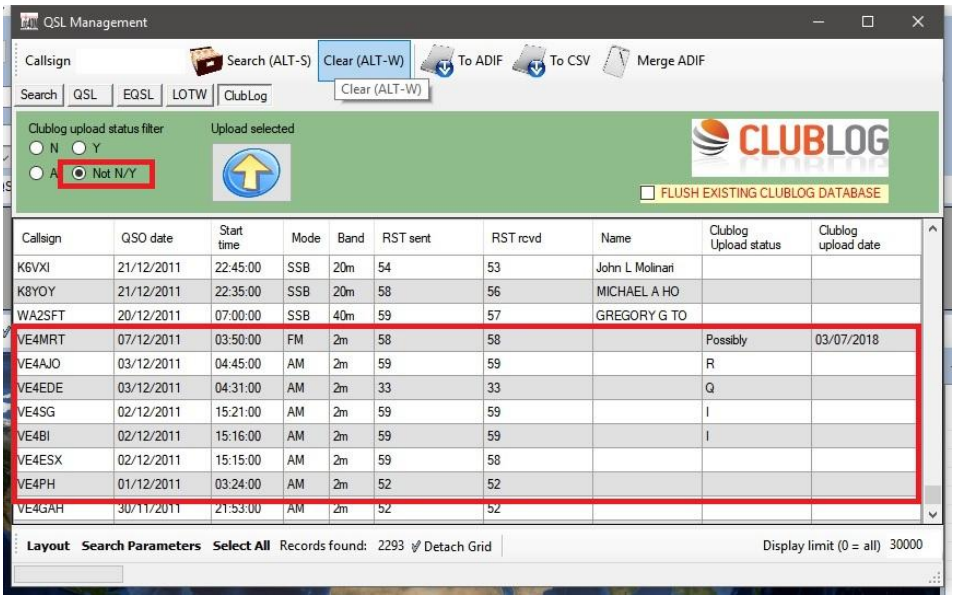
(The red box indicates QSO's displayed in a later display 'All' screen shot)

'Y' button selected - After clicking the 'Search' button this displays all QSO's that are marked Y (Yes) in the 'Clublog Upload Status' field.



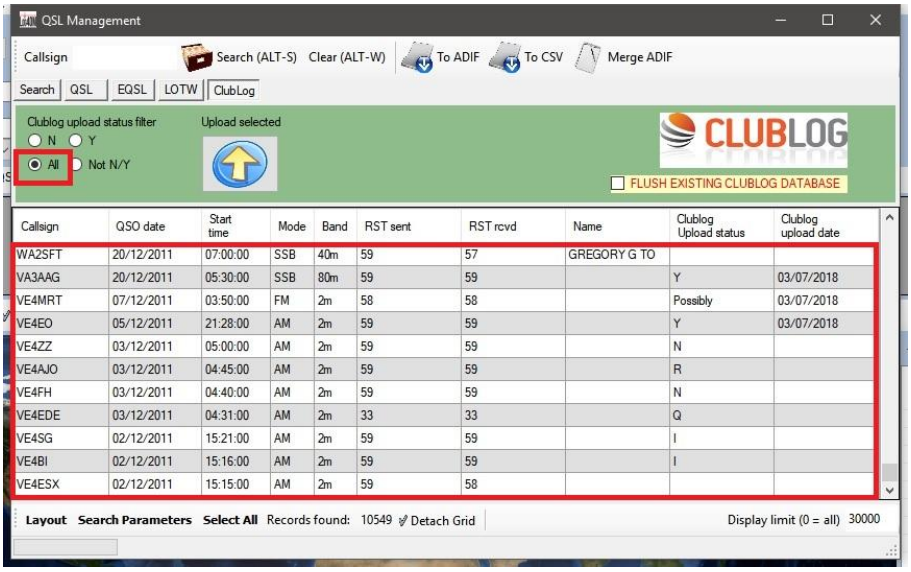
(The red box indicates QSO's displayed in a later display 'All' screen shot)

'Not N/Y' button selected - After clicking the 'Search' button this displays all QSO's that are **NOT** marked Y (Yes) or N (No) in the 'Clublog Upload Status' field.



(The red box indicates QSO's displayed in a later display 'All' screen shot)

'All' button selected - After clicking the 'Search' button this displays all QSO's regardles of how they are marked in the 'Clublog Upload Status' field. (This will include any empty 'Clublog Upload Status' fileds)

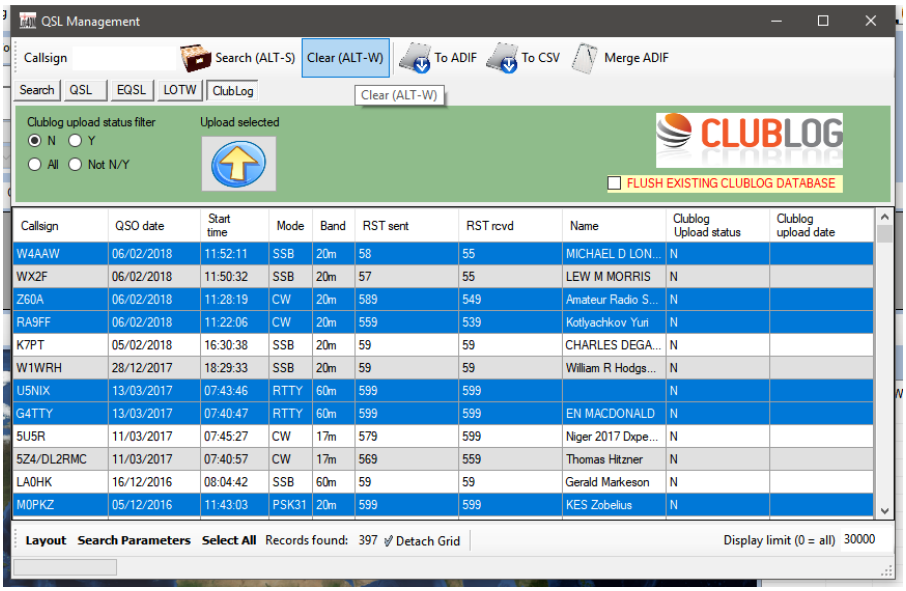


After filtering as above the QSO's required to be uploaded must be highlighted or 'Select all' at the bottom of the window clicked to upload all QSO's displayed.

NOTE: Log4OM has no control over the contents of the 'Clublog Upload Status' field for data imported from other logging software, the field could contain anything!

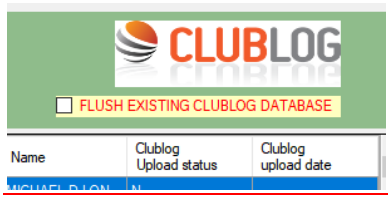
QSO's logged by Log4OM will be logged in accordance with the ADIF format.

Clicking on the 'Upload selected' button with then upload the selected QSO's



Flushing existing Clublog data

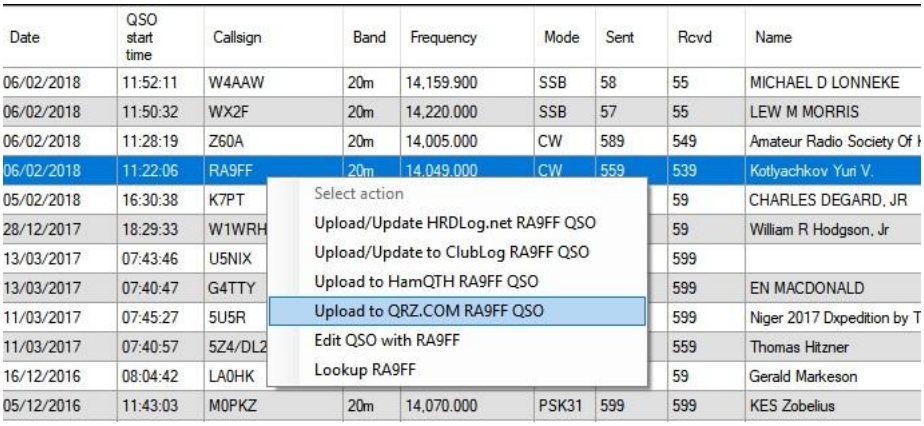
If required all QSO's already uploaded to Clublog can be deleted (Flushed) from the Clublog database and replaced by the new upload by checking the 'Flush existing Clublog Database'



USE THIS FUNCTION WITH CAUTION

HRDLog, Clublog, HamQTH & QRZ.com single QSO uploads

Right clicking with the mouse on a QSO allows the user to upload or update to on line logbooks.



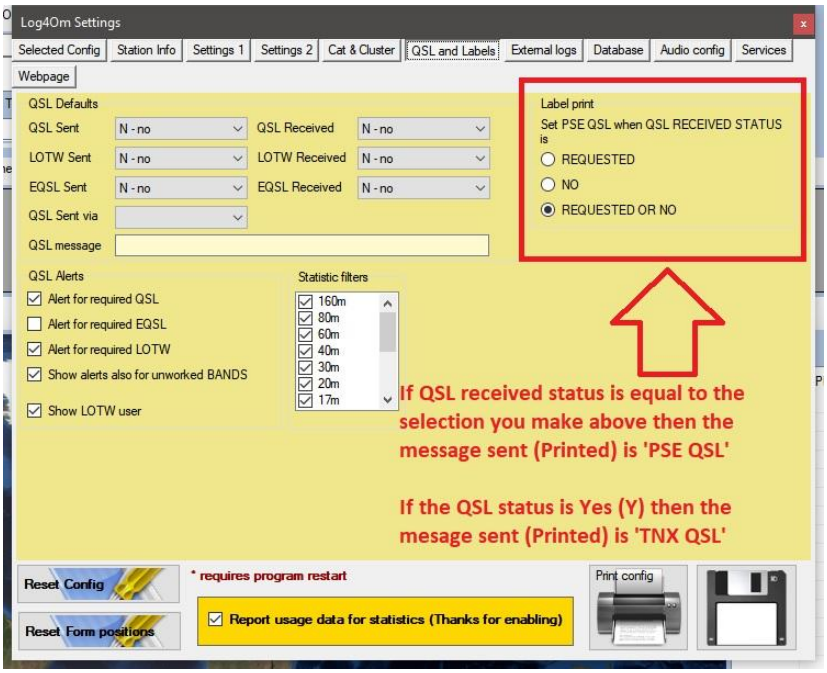
QSO's can also be uploaded automatically as the QSO is saved (In real time) to HRDLog.net, QRZ, HamQTH and Clublog if the parameters are correctly set in the Log4OM Options/External Logs menu's

Menu Bar and Icon Bar

Label print

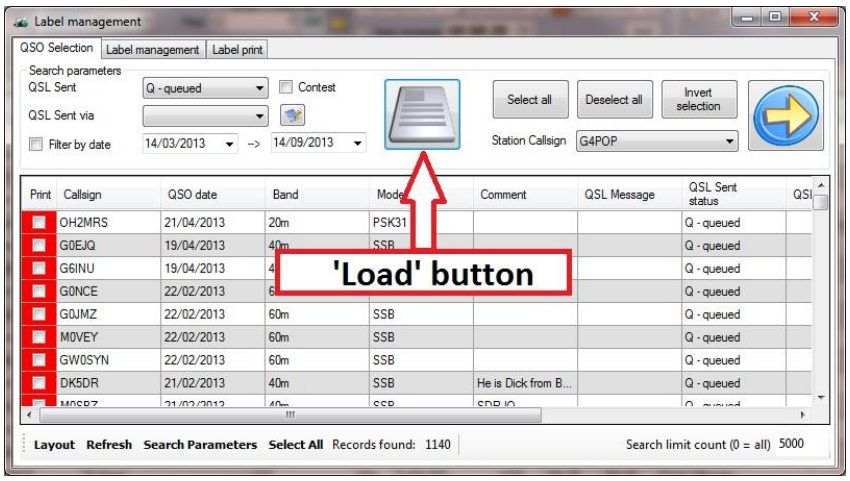
The message printed on the QSL labels is dependent on the QSL received status, a different message is printed if a QSO has already been confirmed by receipt of QSL card and recorded as such by the QSO being marked QSL Received status = Y-yes. In this case the label message is 'TNX QSL'

A choice of the QSL status to print the message 'PSE QSL' for unconfirmed QSO's can be made in the Options/QSL and Labels window - See below:

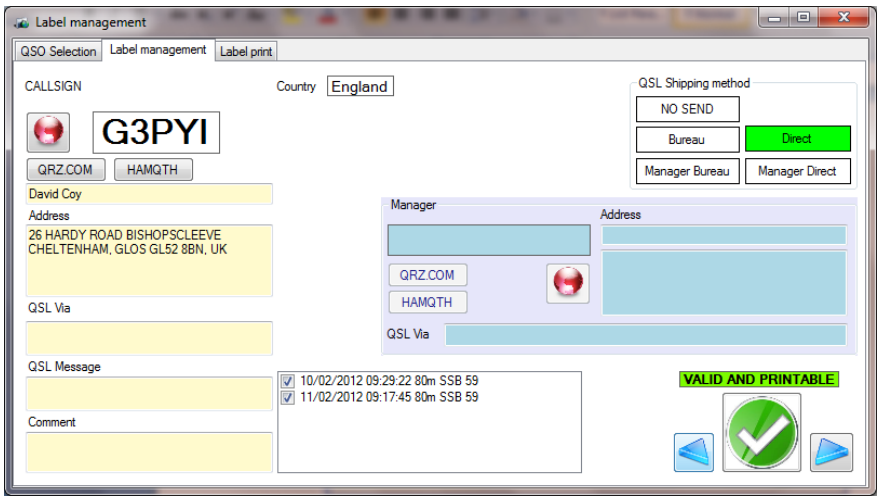


When all incoming QSL cards are recorded as above close the 'QSL Management window and proceed to the 'Label print management' screen.

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

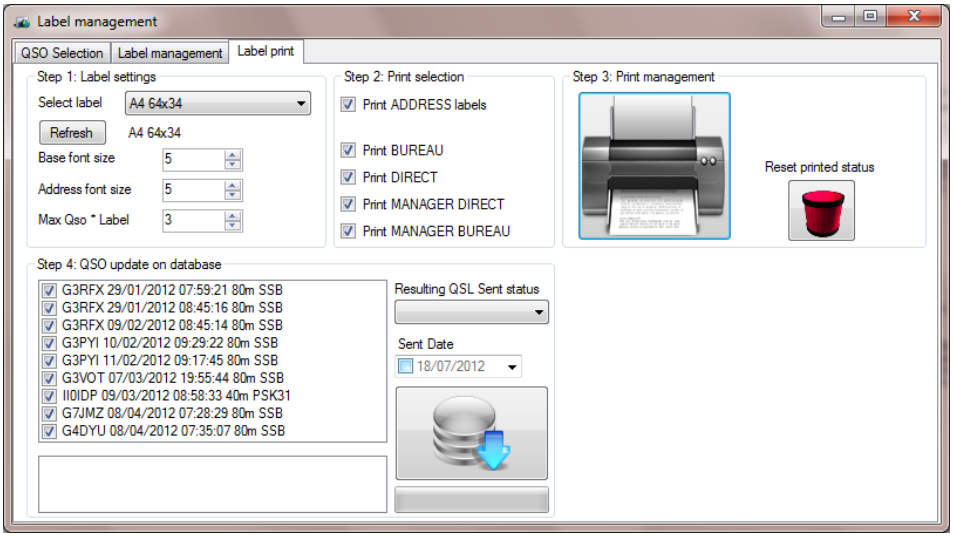


2. Either select the QSO's that are to be printed by checking the appropriate boxes on the left outlined in red or click the 'Select All' button.
3. Update and select the QSO's and shipping method.



4. Click on RED buttons 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.

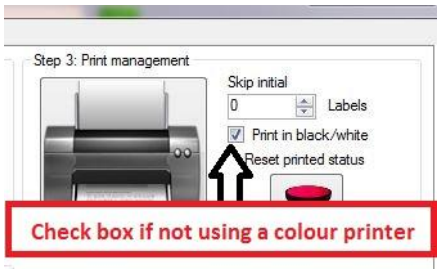
Now select the 'Label print' tab.



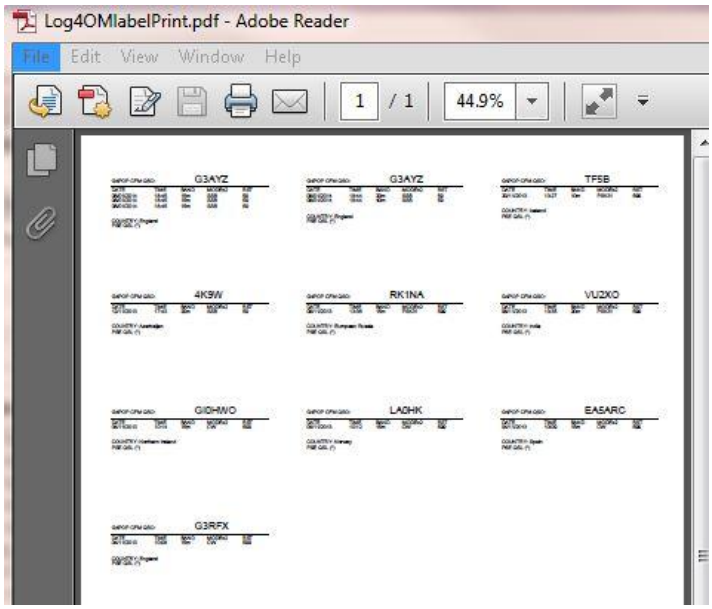
In this window select:

- 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)**

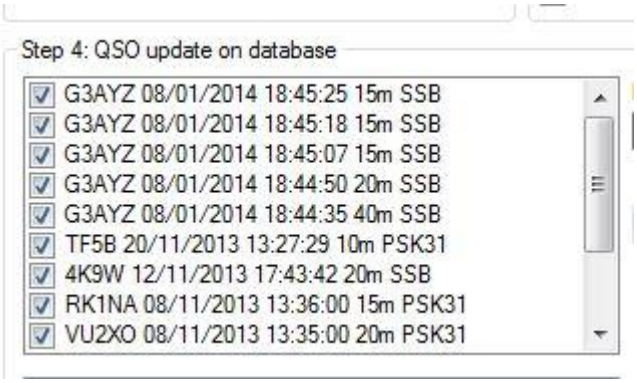
- 4. Check the "Print in black/white" box if not using a colour printer.



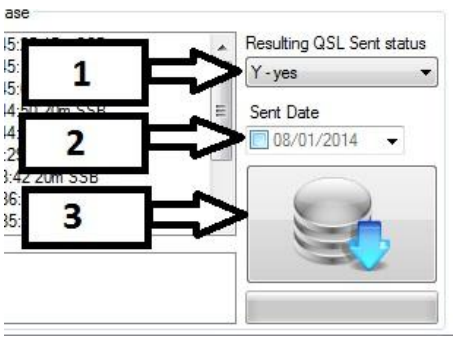
- 5 Click on the printer icon and check that the resulting PDF is exactly as required for printing



- 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.



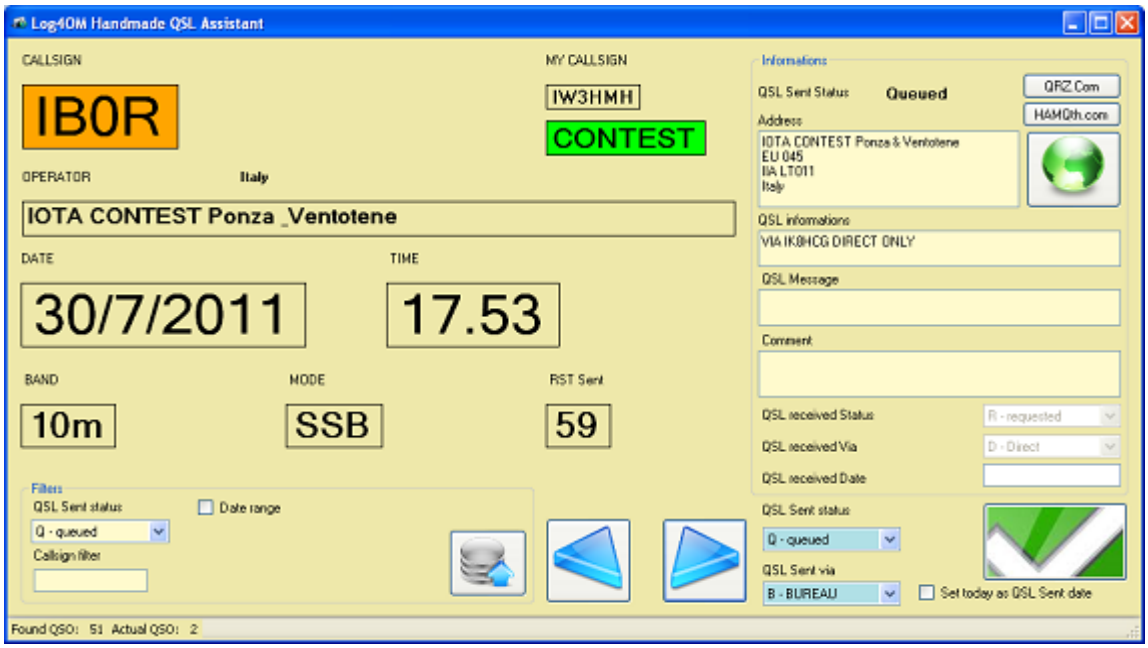
- 6 Select….
    1. 'Resulting QSL Sent status' (i.e. Y- yes/N-no/R-requested/Q-queued/I-ignore), to be displayed in the logbook.
    2. Set the date
    3. Click on the blue, downward pointing arrow to update the QSO records.



Menu Bar and Icon Bar

QSL Assistant

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



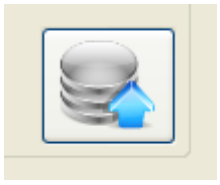
This filter choice loads only the QSOs that are marked 'Requested or Queued', dependent upon requirements.

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:



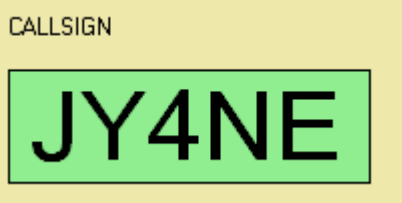
If the filter has not been applied, the application will highlight the call sign in colour, showing the QSL status

Queued

Sent

Not received (N)

Requested



This guards against incorrect data being processed in Log4OM.

Contact Information

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.

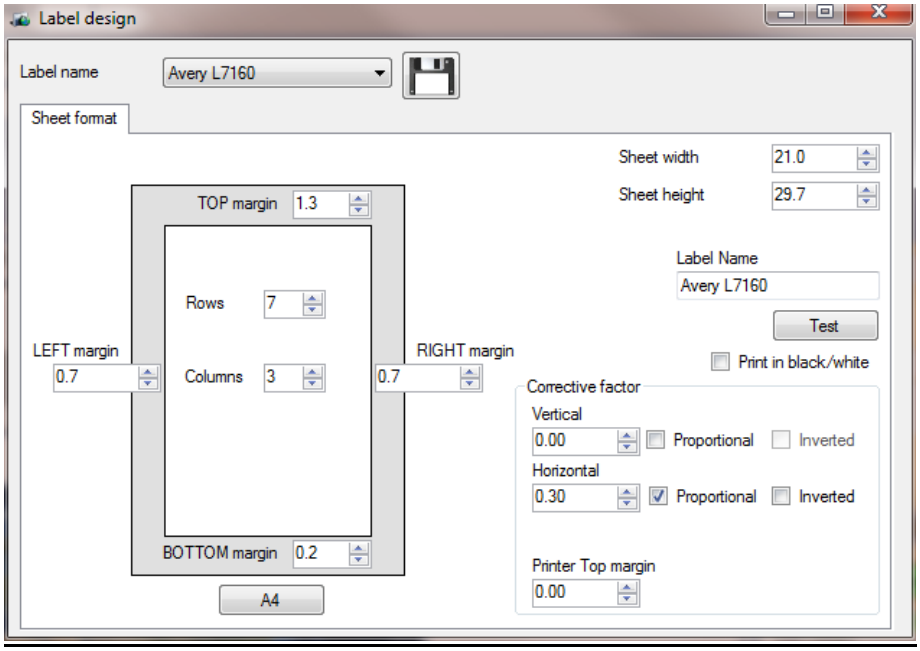
Work flow: For the management of QSLs the workflow standard is as follows:

- 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 ‘QSL tools’ 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.

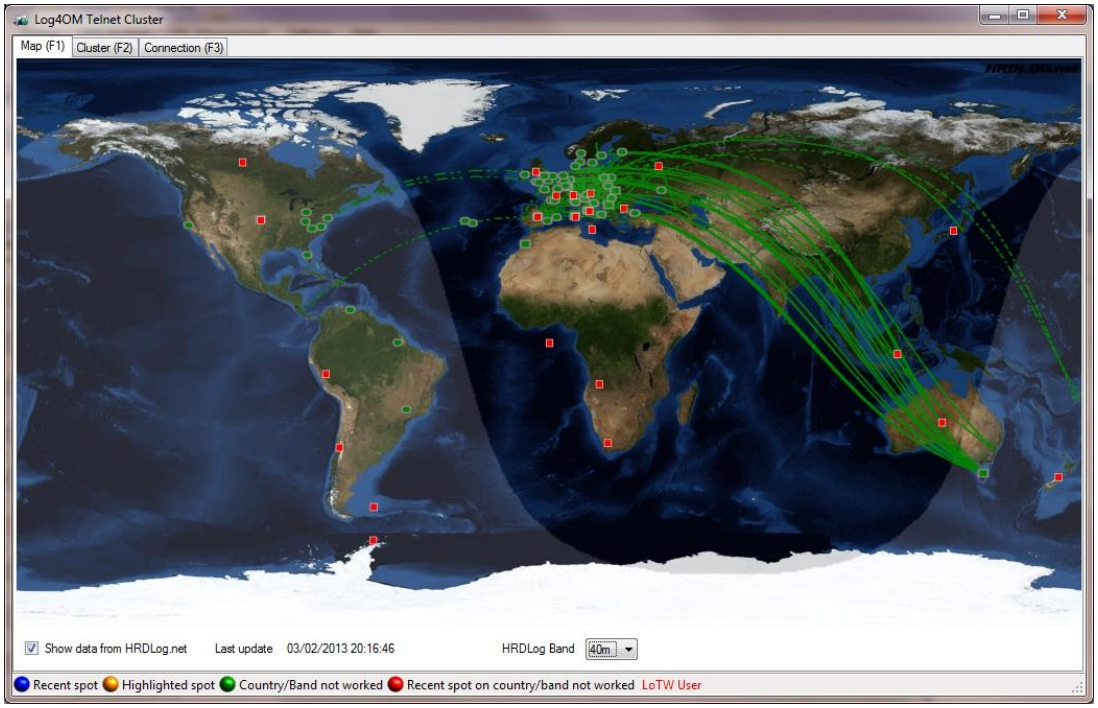
To test the label design click the ‘Test” button.

Menu Bar and Icon Bar

Utilities

Cluster

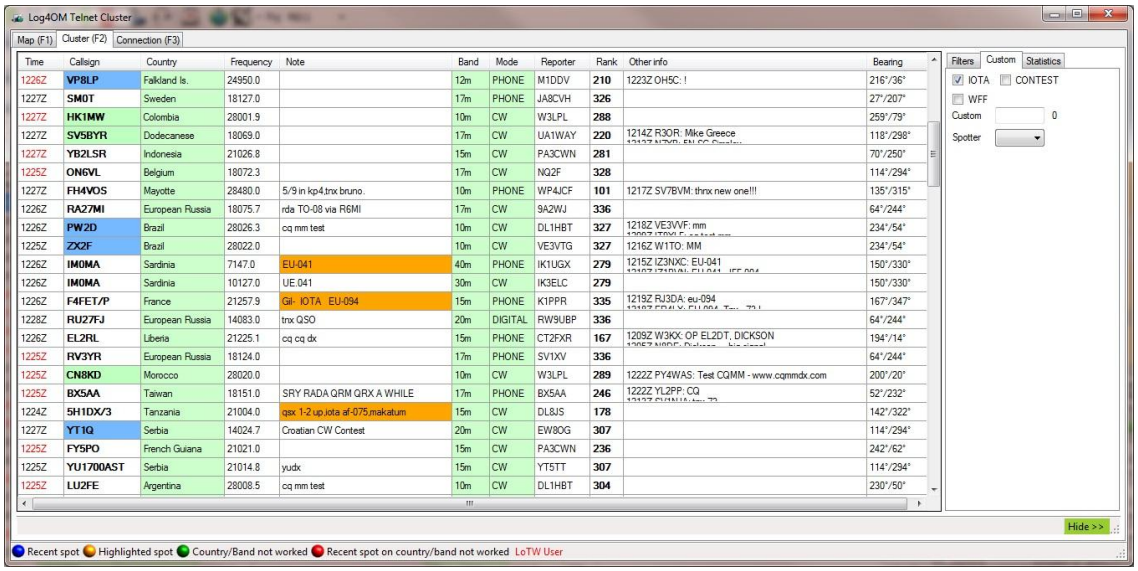
Map – F1



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 R3OR: Mike Greece	118°/298°
1227Z	YB2LSR	Indonesia	21026.8		15m	CW	PA3CWN	281		70°/250°
1225Z	ON6VL	Belgium	18072.3		17m	CW	NQ2F	328		114°/294°
1227Z	FH4VOS	Mayotte	28480.0	5/9 in kp4.tnx bruno.	10m	PHONE	WP4JCF	101	1217Z SV7BVM: thnx new one!!!	135°/315°
1226Z	RA27MI	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		150°/330°
1226Z	F4FET/P	France	21257.9	Gil- IOTA EU-094	15m	PHONE	K1PPR	335	1219Z RJ3DA: eu-094	167°/347°
1228Z	RU27FJ	European Russia	14083.0	tnx QSO	20m	DIGITAL	RW9UBP	336		64°/244°
1226Z	EL2RL	Liberia	21225.1	cq cq dx	15m	PHONE	CT2FXR	167	1209Z W3KK: 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.cqmmdx.com	200°/20°
1225Z	BX5AA	Taiwan	18151.0	SRY RADA QRM QRX A WHILE	17m	PHONE	BX5AA	246	1222Z YL2PP: CQ	52°/232°
1224Z	5H1DX/3	Tanzania	21004.0	qsx 1-2 up.iota af-075,makatum	15m	CW	DL8JS	178		142°/322°
1227Z	YT1Q	Serbia	14024.7	Croatian CW Contest	20m	CW	EW8OG	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

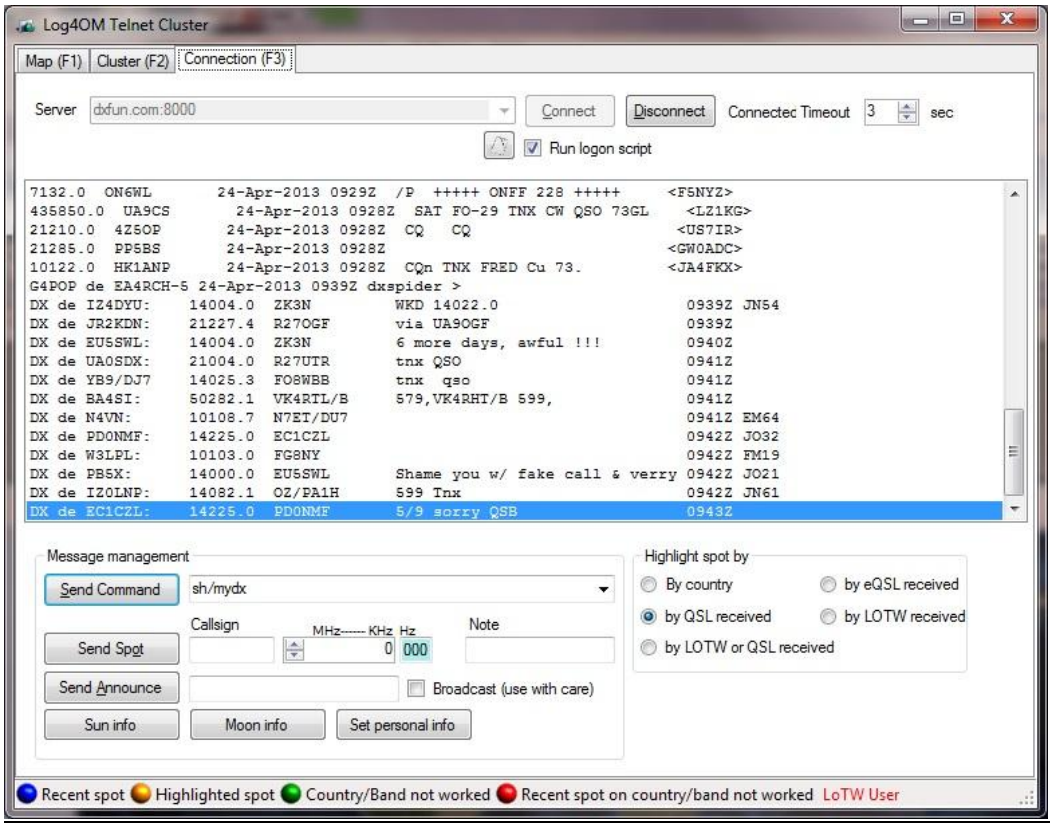
WFF

Contest

Custom filters

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

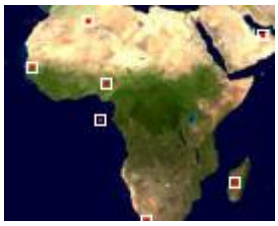
Connection – F3



It is possible to select a specific cluster, as required by using t**he** 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

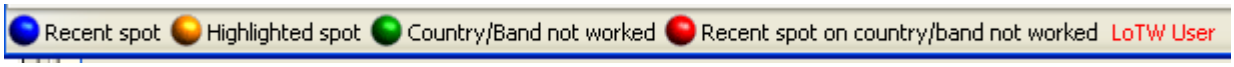


Recent spots are indicated with a border around the marker

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.

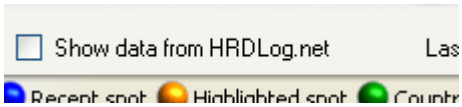
At bottom of the screen there is a key that indicates the status of the spots. (See below)



Cluster - Integration with HRDLog

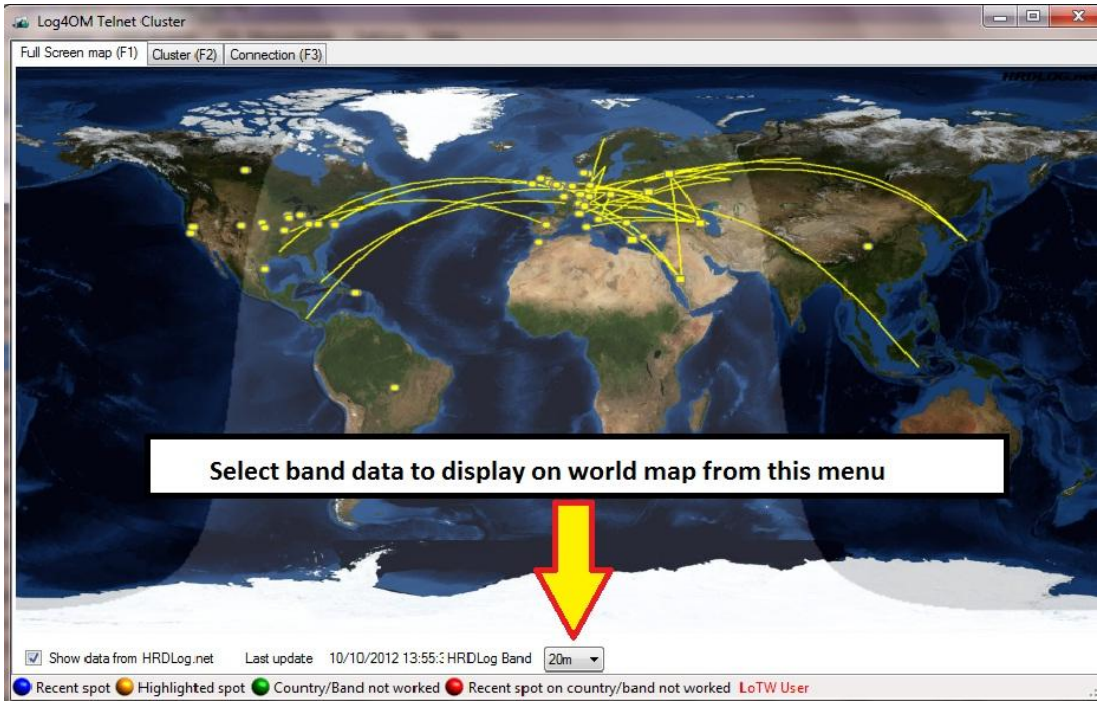
Click on the 'Utilities' pull down menu/'Cluster'/ 'Full Screen Map'(F1).

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.



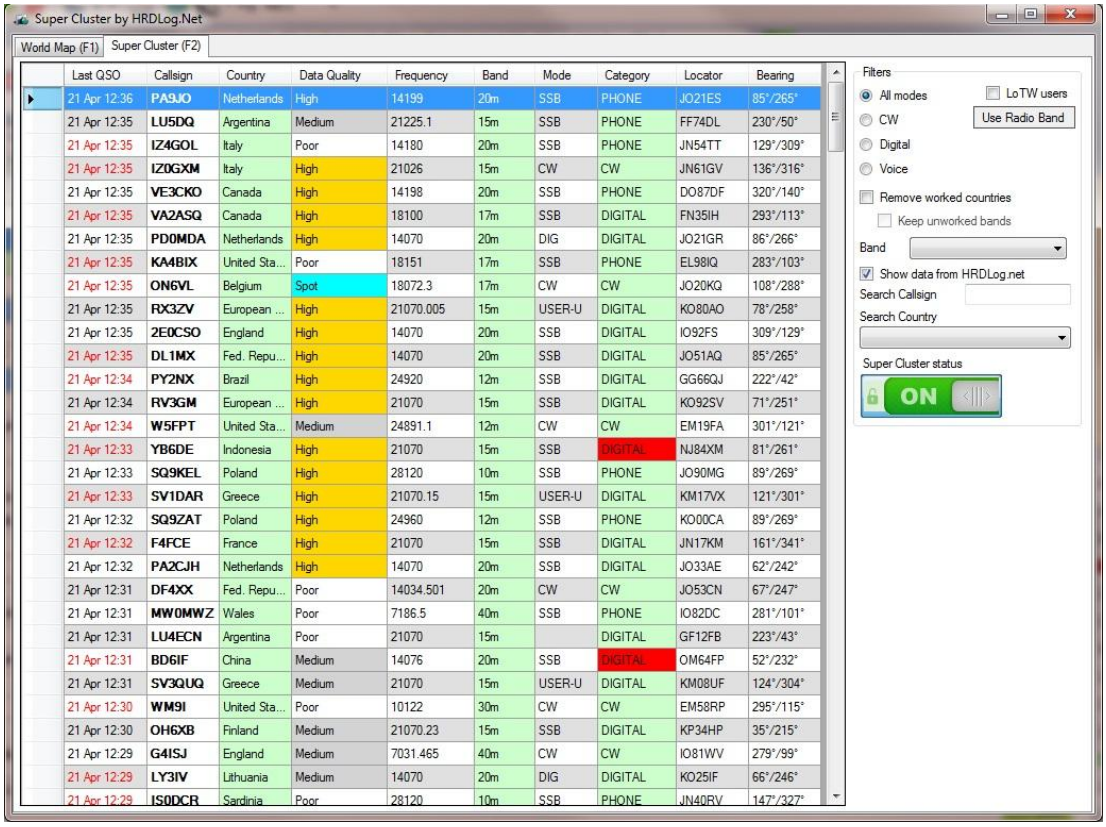
Menu. If no particular band is selected it will be in real time for all bands.

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

Menu Bar and Icon Bar

Log4OM Super Cluster

Super Cluster – F2



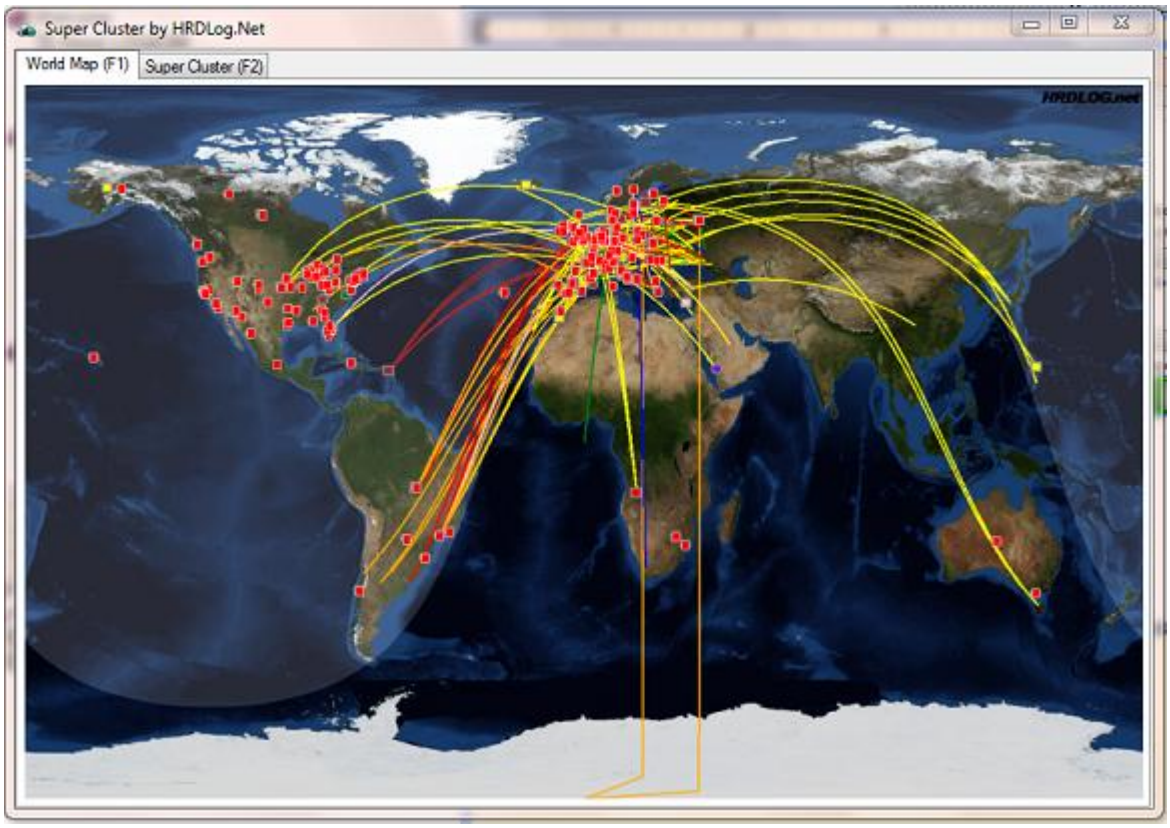
This window displays the calls from HRDLog.net as a list and defines the data quality (column 4) as Excellent, Good, Medium or Poor reliability.

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 callsign on the official clusters.

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

World Map - F1

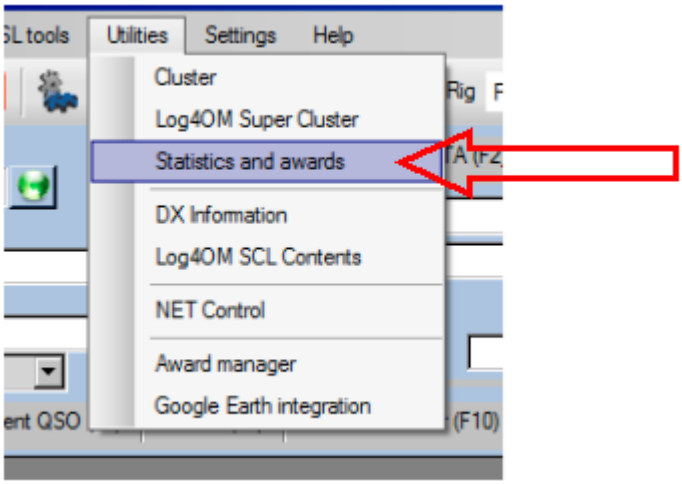


This window graphically displays the data from the Super Cluster F2 window. Clicking a spot will display the call information.

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

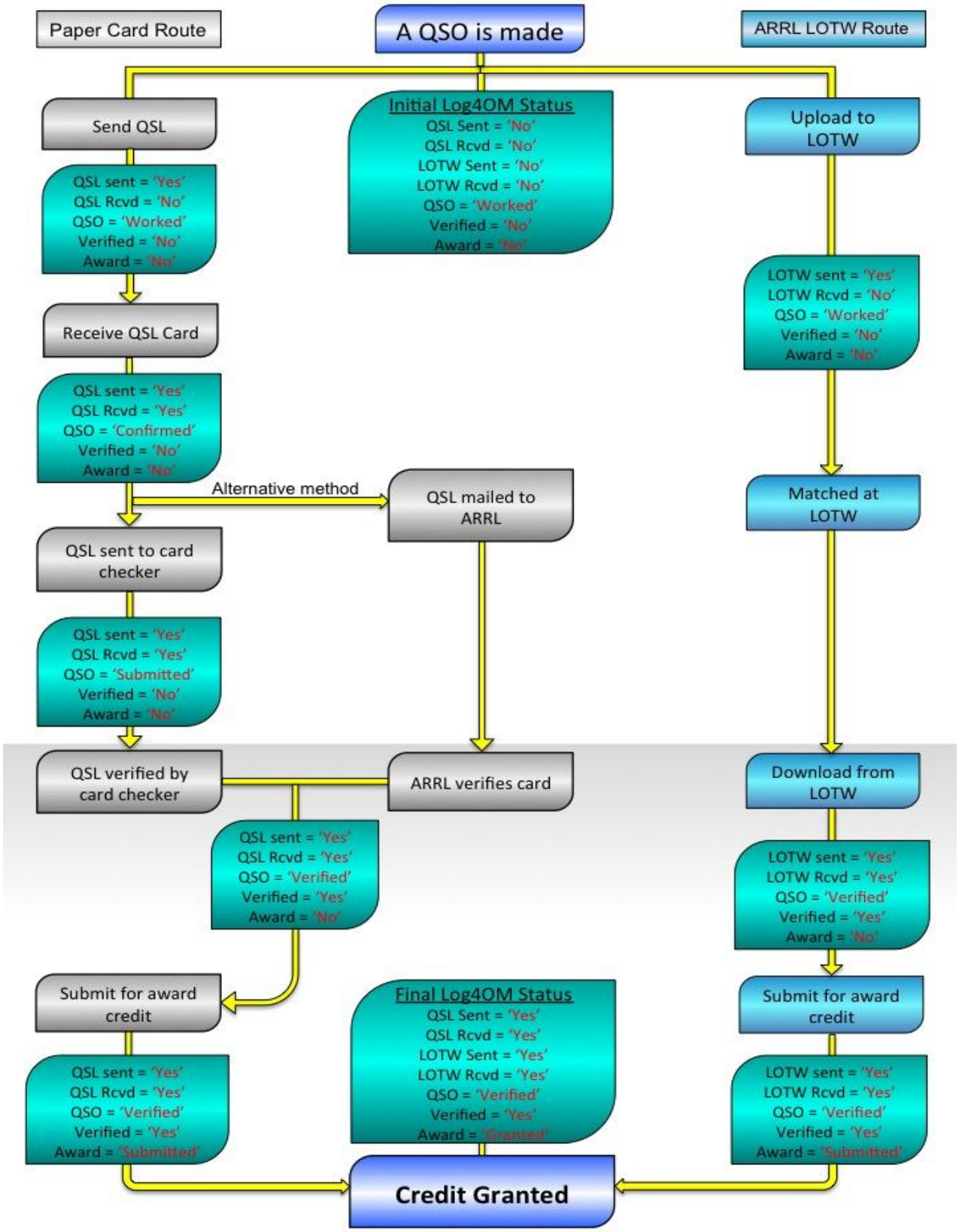
On the left side of the QSO award tab is where the user records those awards the QSO is being submitted for and a check mark is entered for each award type.

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.

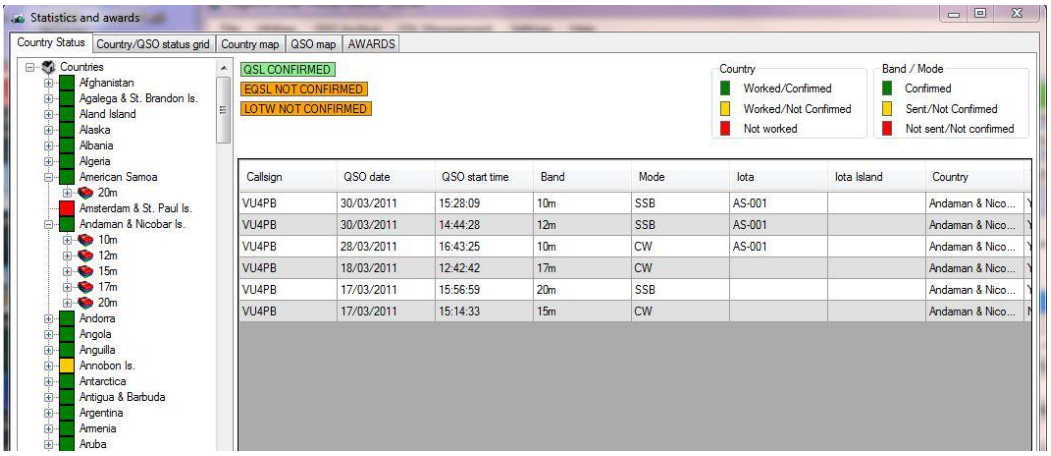
Statistics awards tab.
Some of the above actions can be achieved automatically in the Statistics awards tab, please refer to the relevant section of this manual.

QSO to DXCC Award



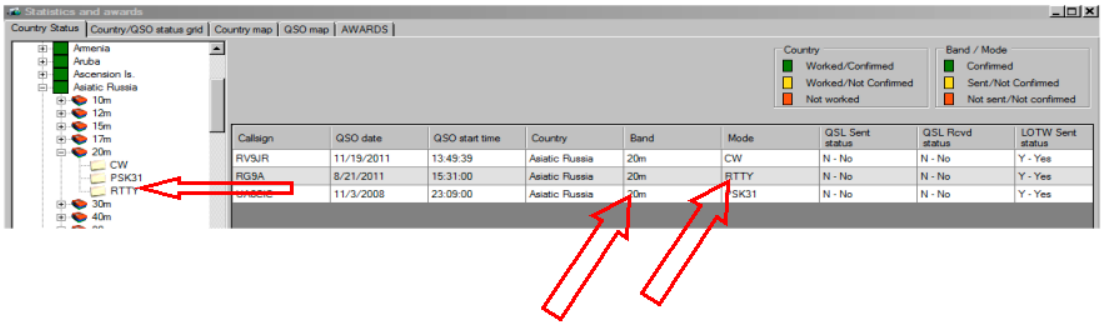
Country Statistics:

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



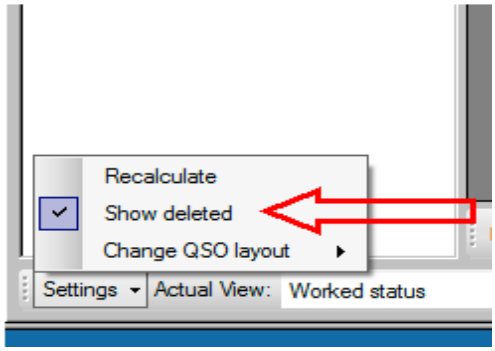
Each country listed can be expanded by clicking on the + sign next to the country name. This will show the bands on which the user has worked the country. Click on a band to open it and see the modes worked for the country/band.

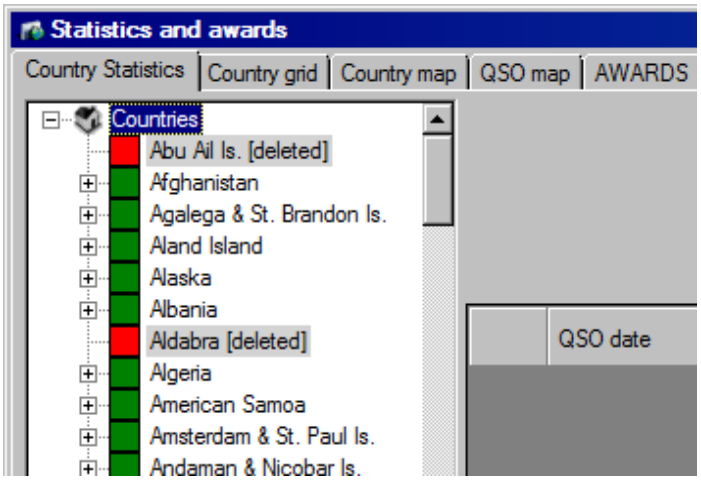
Click on a mode to display the QSOs that comprise the Country/Band/Mode.



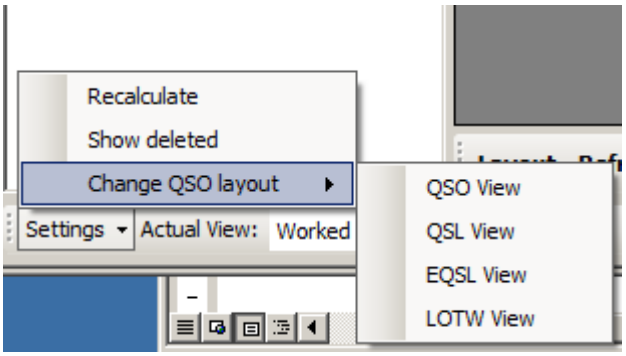
In the above example, the display shows the QSO for Asiatic Russia, RTTY on 20 meters.

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.

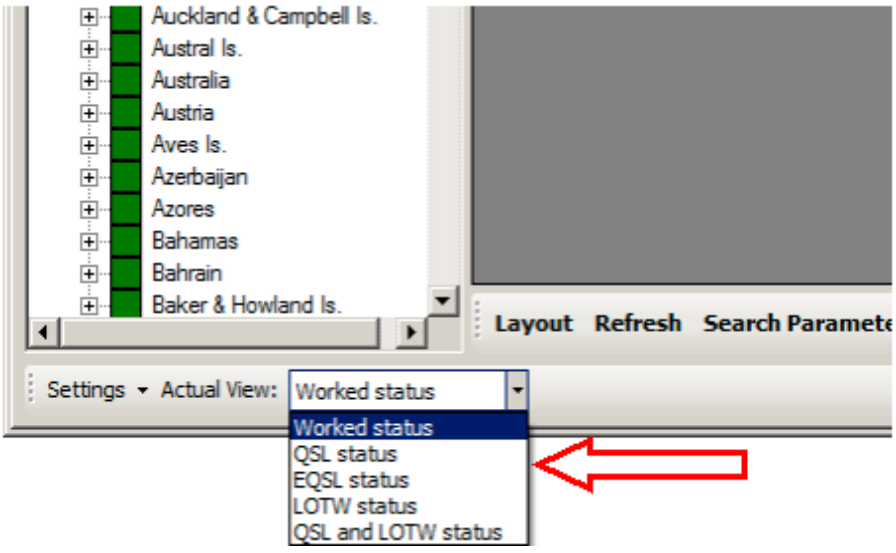




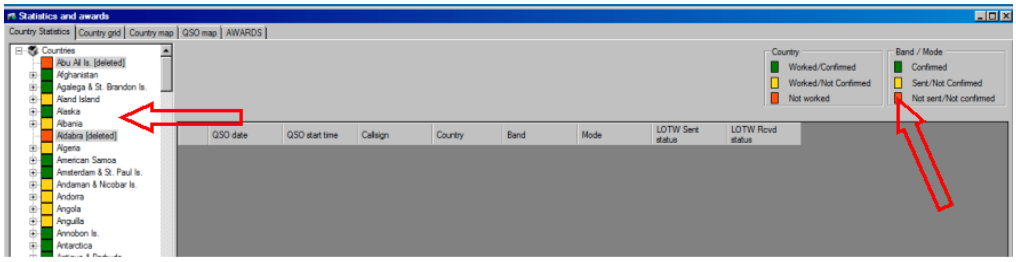
The displayed QSOs can be viewed in one of four (4) different views:



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.

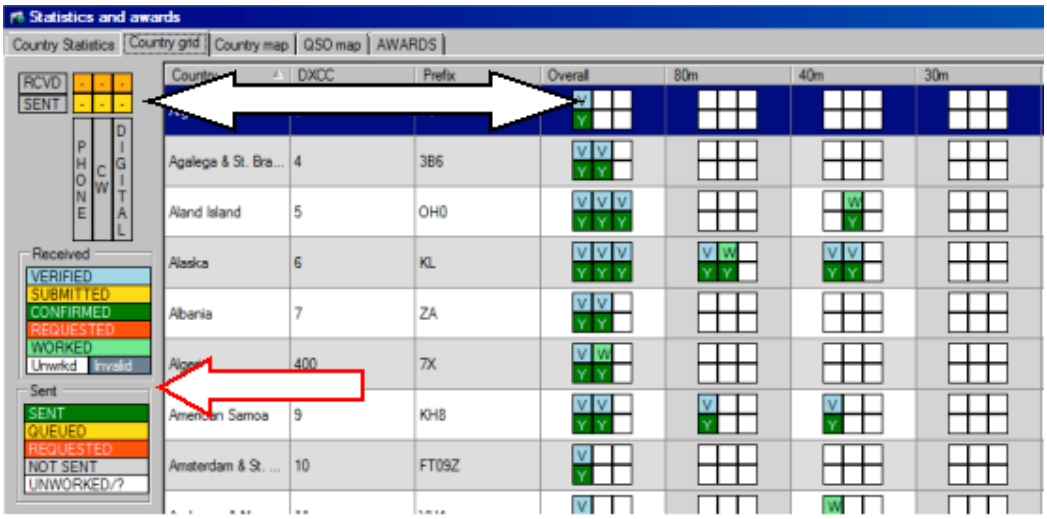


The colour coding legends are shown in the top, right portion of the display:



The Country Grid

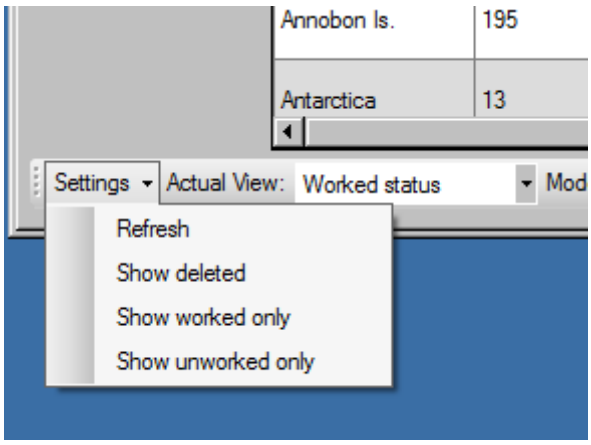
Click on the Country Grid tab to open the following window:



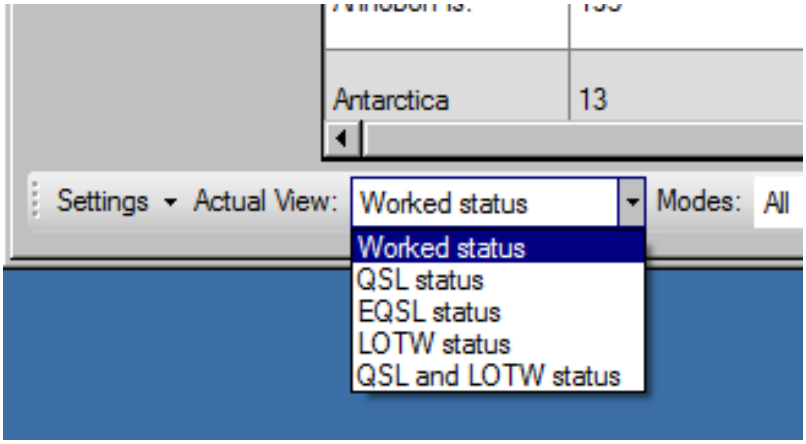
The legend in the top left portion of the display (upper arrow) shows the orientation of the cell column and row boxes.

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.

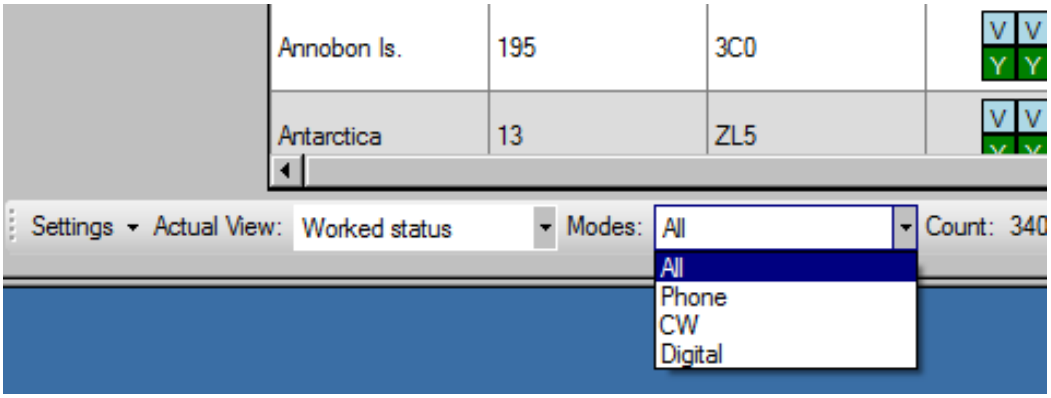
The user can select the contents to be displayed:



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.

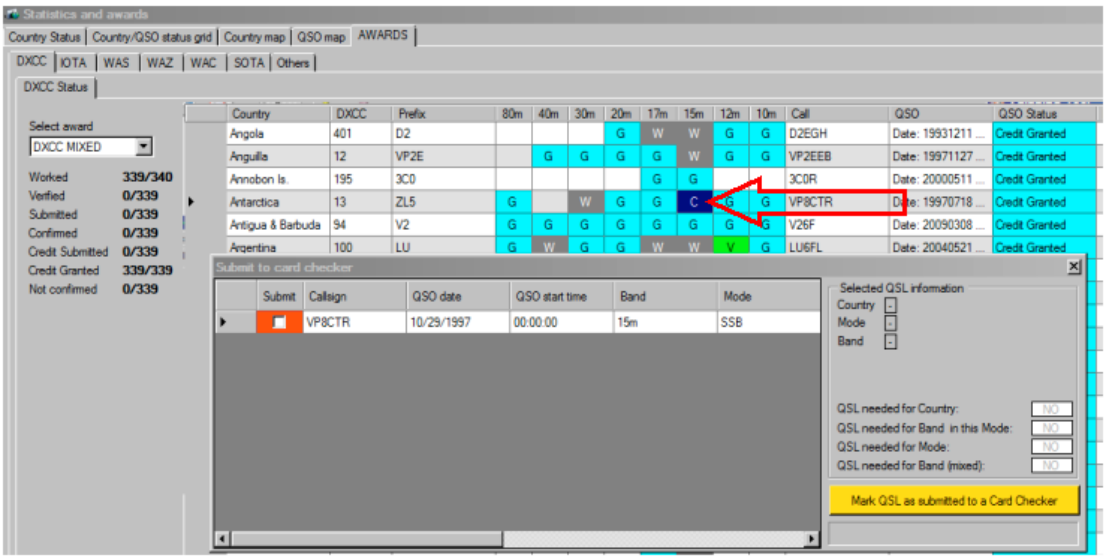
The status of 'Worked' countries, by band and mode, is shown in the DXCC Awards section of LOG4OM. To see this, click on 'Utilities' drop down Menu, then select 'Statistics and Awards'.

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

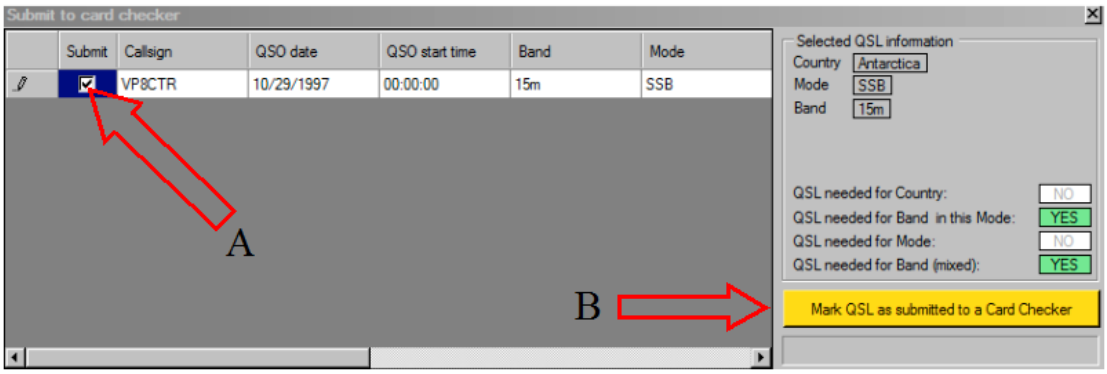
The first step is to 'validate' the QSL. This involves entering the details of each QSO on the appropriate submission form and gaining the validation of an ARRL card checker.

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



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.

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.

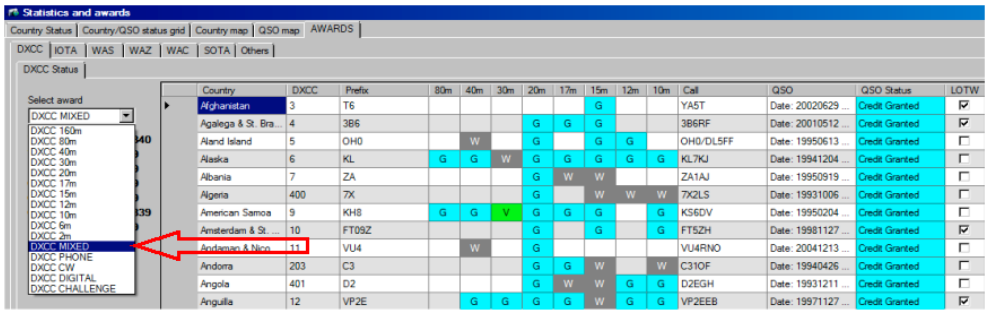
LOTW Verification

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.

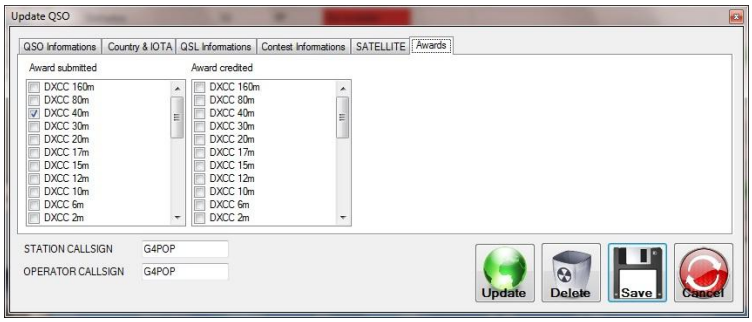
Selecting QSOs for award submission

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.



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.

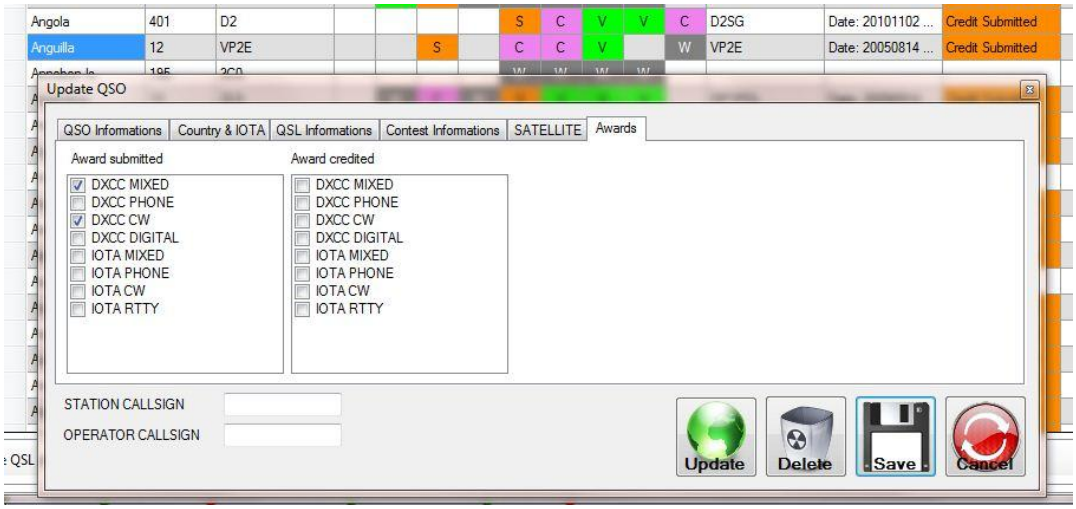
Select 'Credit Submitted QSO' from the "Actions' list and click on 'Mark Submitted as granted'

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

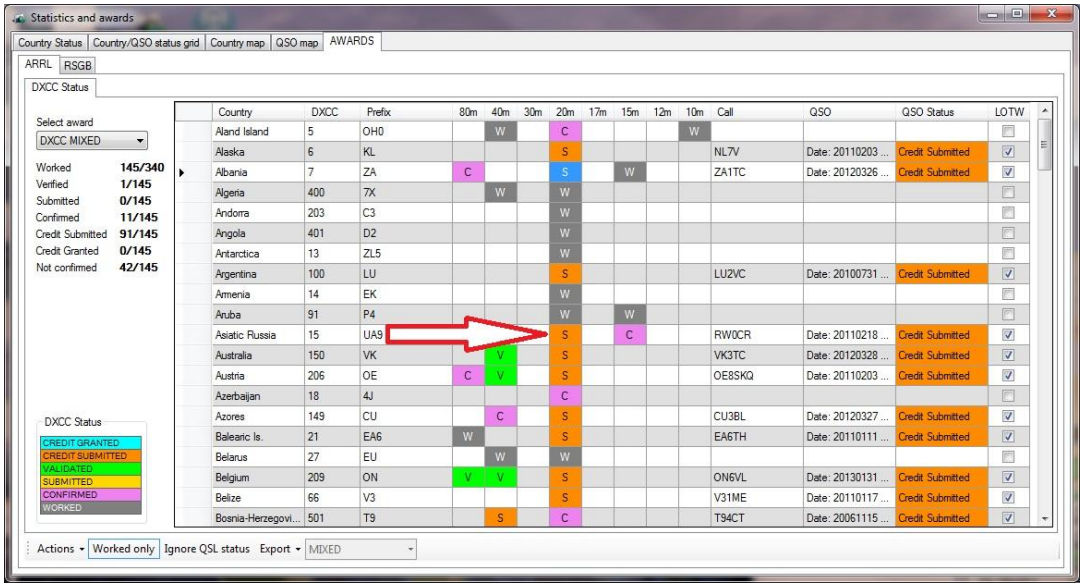
There are two methods for updating the status of a QSO award credit in Log4OM.

IMPORTANT NOTE.

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

Method 1

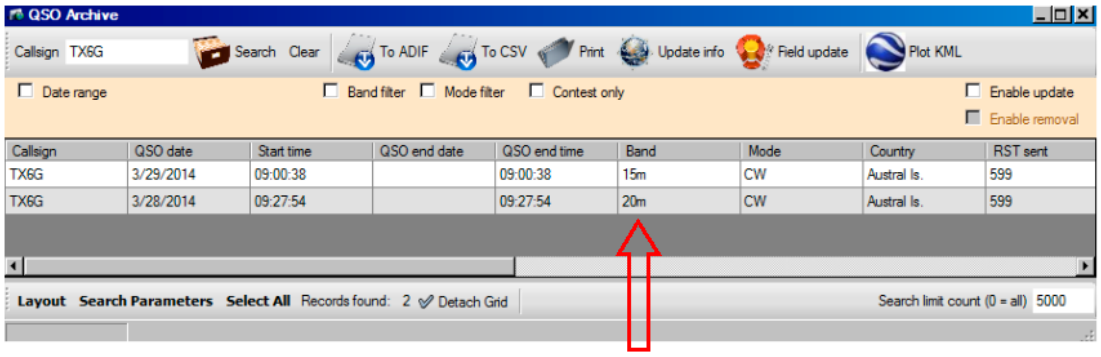
If the QSO's in Log4OM are already marked as submitted in the statistics screen as below.



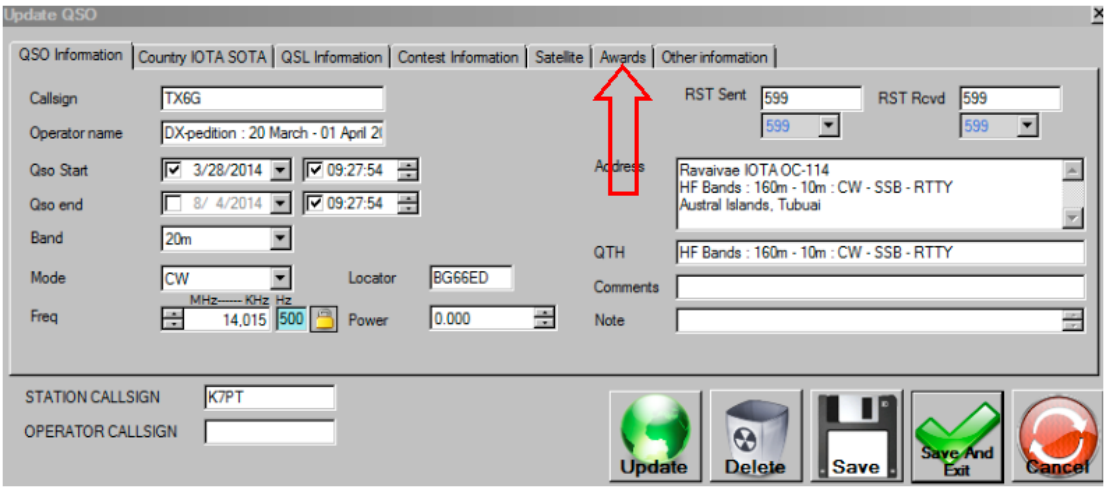
Click the submitted marker as shown to open the QSO edit window

Method 2

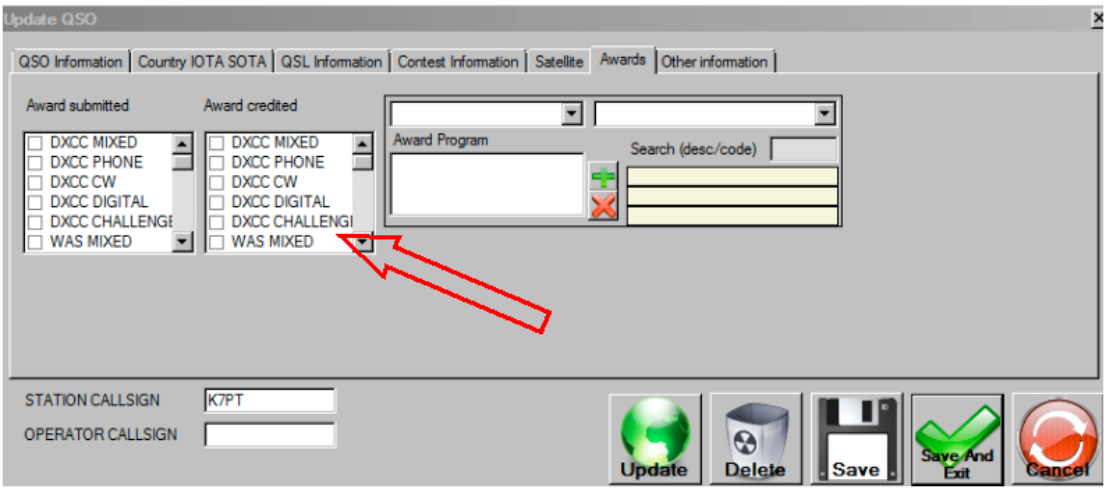
If the QSO's are not already marked submitted in Log4OM then in the QSO Archive manager window search for the call sign for which credit has been granted as shown below.



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"

ARRL Digital Application for paper QSL's

Quote from the ARRL website:

"Beginning April 2 at 12:01 AM EDT (0401 UTC) 2014, the ARRL's new Online DXCC tool will be ready to accept applications, allowing hams to supply the data from traditional paper QSLs in a digital form to apply for a new DXCC award or endorsement. Submitting a DXCC application using Online DXCC is easier than making a paper application, saving both time and money.

Using the Online DXCC Application, the user can select the cards that he or she would like to have checked by a card checker and, at his or her convenience, type that data into a form (which can be saved and retrieved at any time until submitted) and make an application for DXCC. When the application is finished, the participant will be able to print the list of cards and take the list and the cards (in the same order that they are entered into the form) to a card checker who will check the cards, note any changes and send the form to ARRL HQ. The card checker's job is exactly the same as before, except he or she does not need to collect a payment (unless the participant has worked that out with the card checker), as the client can pay online. Once submitted, DXCC staff can access the file submitted by the client, quickly make any changes noted by the card checker and process the application. The Online DXCC Application will have rates that are half those of a traditional paper QSL application that is sent to ARRL HQ."

There is also a facility on the ARRL web site to upload a pre-prepared ADIF file to avoid having to manually input each QSO. It is possible to prepare an ADIF file in Log4OM so that the user can then manually upload the file to the ARRL website as follows:

1. In the QSO Archive Manager set up some search parameters to refine the displayed list of QSO's
   e.g. It is only required to see QSO's that have:

   a. Not already had credit granted

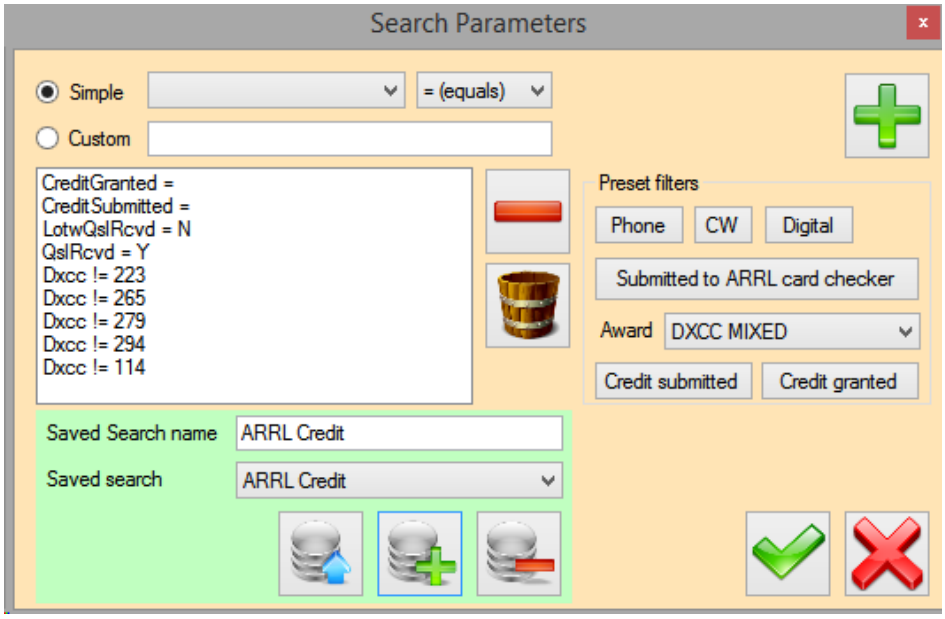
   b. A credit submission has not already been made

   c. A LOTW verification has not been received

   d. A paper QSL has been received

   e. Exclude QSO's from your own country

Here is an example of a search parameter as listed above:

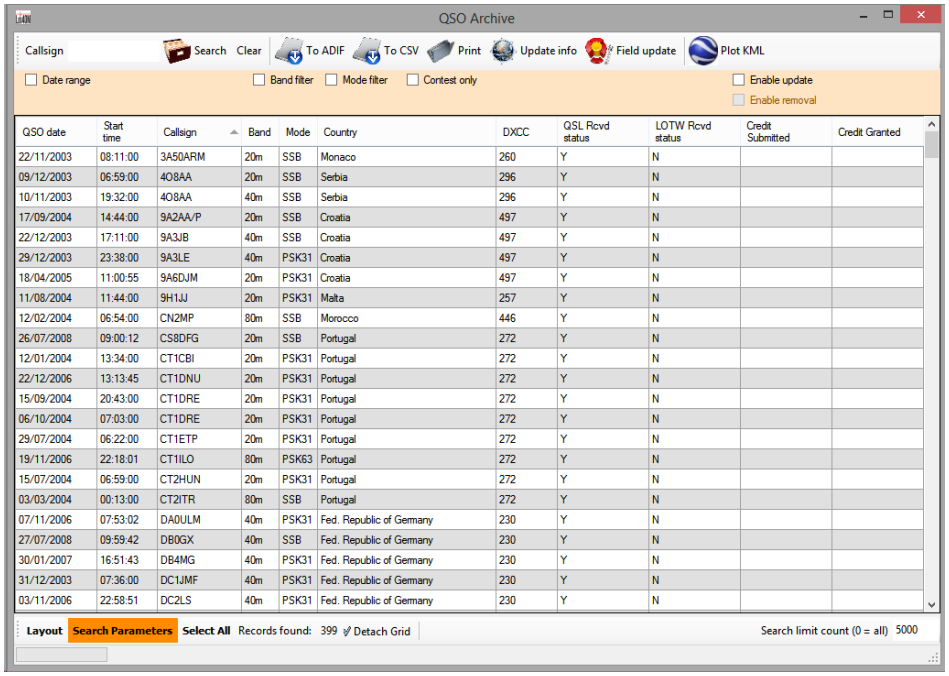


Note: The search can be saved for future use to avoid repetition of set up

2. Check the “enable updates” check box

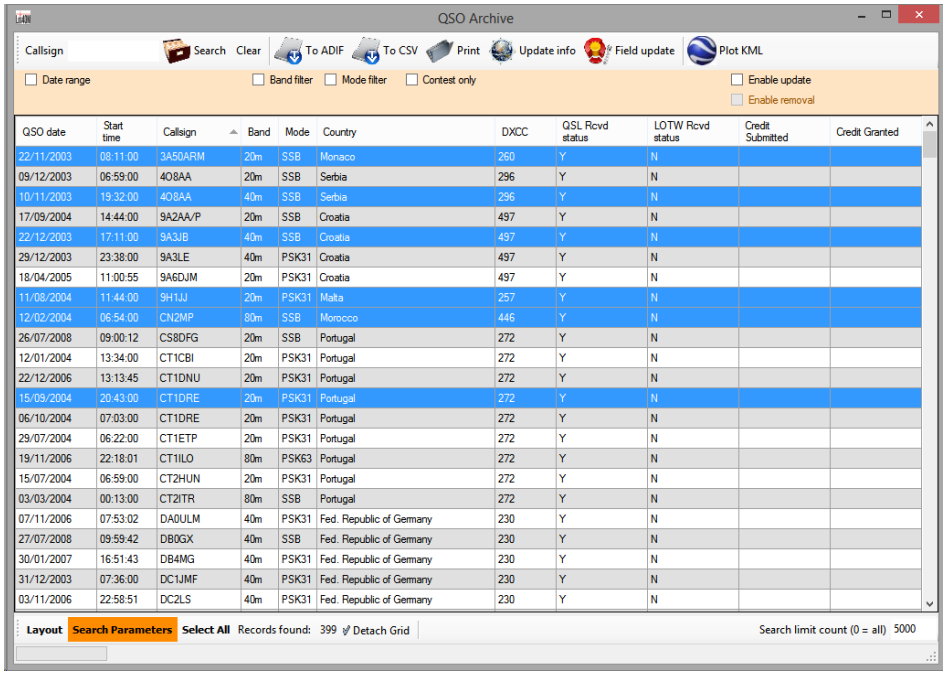
3. Once the QSO list has been filtered according to the users individual requirements the list can be sorted in call sign or country order by clicking on the column title.

DXCC_



QSO date	Start time	Callsign	Band	Mode	Country	DXCC	QSL Rcvd status	LOTW Rcvd status	Credit Submitted	Credit Granted
22/11/2003	08:11:00	3A50ARM	20m	SSB	Monaco	260	Y	N		
09/12/2003	06:59:00	4O8AA	20m	SSB	Serbia	296	Y	N		
10/11/2003	19:32:00	4O8AA	40m	SSB	Serbia	296	Y	N		
17/09/2004	14:44:00	9A2AA/P	20m	SSB	Croatia	497	Y	N		
22/12/2003	17:11:00	9A3JB	40m	SSB	Croatia	497	Y	N		
29/12/2003	23:38:00	9A3LE	40m	PSK31	Croatia	497	Y	N		
18/04/2005	11:00:55	9A6DJM	20m	PSK31	Croatia	497	Y	N		
11/08/2004	11:44:00	9H1JJ	20m	PSK31	Malta	257	Y	N		
12/02/2004	06:54:00	CN2MP	80m	SSB	Morocco	446	Y	N		
26/07/2008	09:00:12	CS8DFG	20m	SSB	Portugal	272	Y	N		
12/01/2004	13:34:00	CT1CBI	20m	PSK31	Portugal	272	Y	N		
22/12/2006	13:13:45	CT1DNU	20m	PSK31	Portugal	272	Y	N		
15/09/2004	20:43:00	CT1DRE	20m	PSK31	Portugal	272	Y	N		
06/10/2004	07:03:00	CT1DRE	20m	PSK31	Portugal	272	Y	N		
29/07/2004	06:22:00	CT1ETP	20m	PSK31	Portugal	272	Y	N		
19/11/2006	22:18:01	CT1ILO	80m	PSK63	Portugal	272	Y	N		
15/07/2004	06:59:00	CT2HUN	20m	PSK31	Portugal	272	Y	N		
03/03/2004	00:13:00	CT2ITR	80m	SSB	Portugal	272	Y	N		
07/11/2006	07:53:02	DA0ULM	40m	PSK31	Fed. Republic of Germany	230	Y	N		
27/07/2008	09:59:42	DB0GX	40m	SSB	Fed. Republic of Germany	230	Y	N		
30/01/2007	16:51:43	DB4MG	40m	PSK31	Fed. Republic of Germany	230	Y	N		
31/12/2003	07:36:00	DC1JMF	40m	PSK31	Fed. Republic of Germany	230	Y	N		
03/11/2006	22:58:51	DC2LS	40m	PSK31	Fed. Republic of Germany	230	Y	N		

4. Select the QSO's that are to be saved to the ARRL upload ADIF by Ctrl/Click



QSO date	Start time	Callsign	Band	Mode	Country	DXCC	QSL Rcvd status	LOTW Rcvd status	Credit Submitted	Credit Granted
22/11/2003	08:11:00	3A50ARM	20m	SSB	Monaco	260	Y	N		
09/12/2003	06:59:00	4O8AA	20m	SSB	Serbia	296	Y	N		
10/11/2003	19:32:00	4O8AA	40m	SSB	Serbia	296	Y	N		
17/09/2004	14:44:00	9A2AA/P	20m	SSB	Croatia	497	Y	N		
22/12/2003	17:11:00	9A3JB	40m	SSB	Croatia	497	Y	N		
29/12/2003	23:38:00	9A3LE	40m	PSK31	Croatia	497	Y	N		
18/04/2005	11:00:55	9A6DJM	20m	PSK31	Croatia	497	Y	N		
11/08/2004	11:44:00	9H1JJ	20m	PSK31	Malta	257	Y	N		
12/02/2004	06:54:00	CN2MP	80m	SSB	Morocco	446	Y	N		
26/07/2008	09:00:12	CS8DFG	20m	SSB	Portugal	272	Y	N		
12/01/2004	13:34:00	CT1CBI	20m	PSK31	Portugal	272	Y	N		
22/12/2006	13:13:45	CT1DNU	20m	PSK31	Portugal	272	Y	N		
15/09/2004	20:43:00	CT1DRE	20m	PSK31	Portugal	272	Y	N		
06/10/2004	07:03:00	CT1DRE	20m	PSK31	Portugal	272	Y	N		
29/07/2004	06:22:00	CT1ETP	20m	PSK31	Portugal	272	Y	N		
19/11/2006	22:18:01	CT1ILO	80m	PSK63	Portugal	272	Y	N		
15/07/2004	06:59:00	CT2HUN	20m	PSK31	Portugal	272	Y	N		
03/03/2004	00:13:00	CT2ITR	80m	SSB	Portugal	272	Y	N		
07/11/2006	07:53:02	DA0ULM	40m	PSK31	Fed. Republic of Germany	230	Y	N		
27/07/2008	09:59:42	DB0GX	40m	SSB	Fed. Republic of Germany	230	Y	N		
30/01/2007	16:51:43	DB4MG	40m	PSK31	Fed. Republic of Germany	230	Y	N		
31/12/2003	07:36:00	DC1JMF	40m	PSK31	Fed. Republic of Germany	230	Y	N		
03/11/2006	22:58:51	DC2LS	40m	PSK31	Fed. Republic of Germany	230	Y	N		

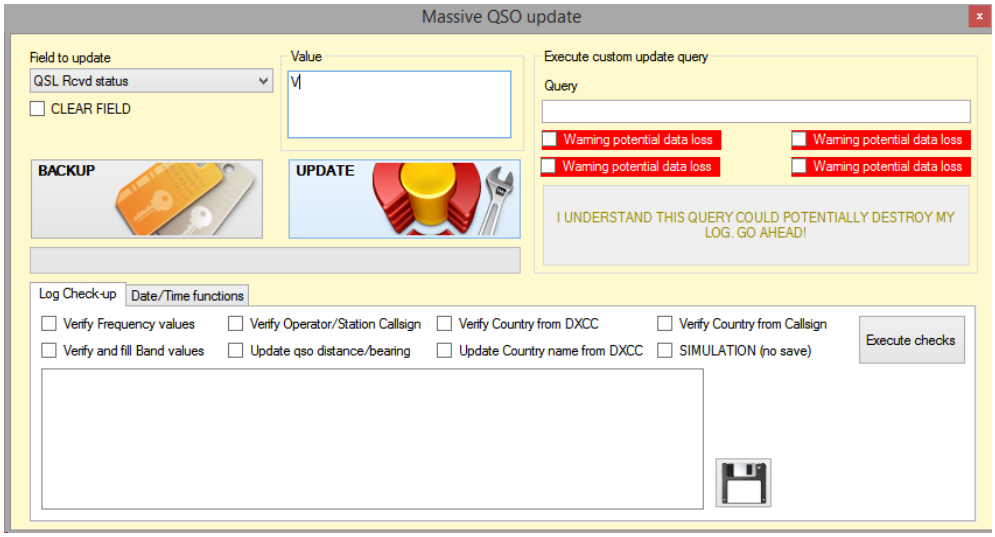
5. Click on the "To ADIF" icon on the tool bar at the top of the window
6. Select a place to save the file to and give the file a name by clicking the "Open" button
7. Check the "Export only standard ADIF fields" check box
8. Choose ADIF version 3X
9. Click the "Export ADIF" button

The ADIF file is now ready to be imported to the ARRL website

Marking the QSO's

While the QSO's that have been exported to ADIF are still highlighted click "Field Update" on the top toolbar.

1. Select "QSL Rcvd status" in the "Field to update" list
2. Enter "V" for Validated in the 'Value' field
3. Click the "Update" button



R (Requested) could be used for this marking, it is the users choice.

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.

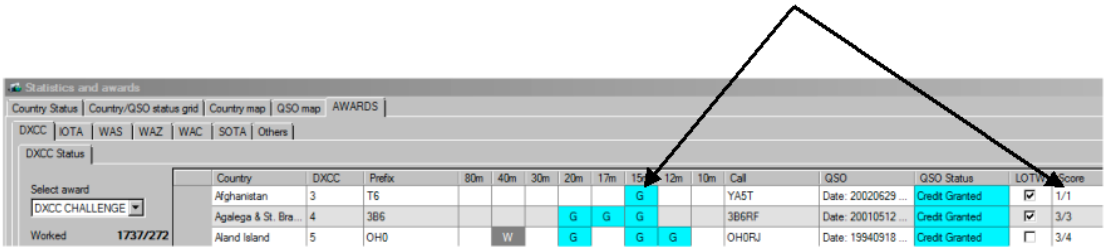
Plaques can also be endorsed in increments of 500 additional band points.

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.

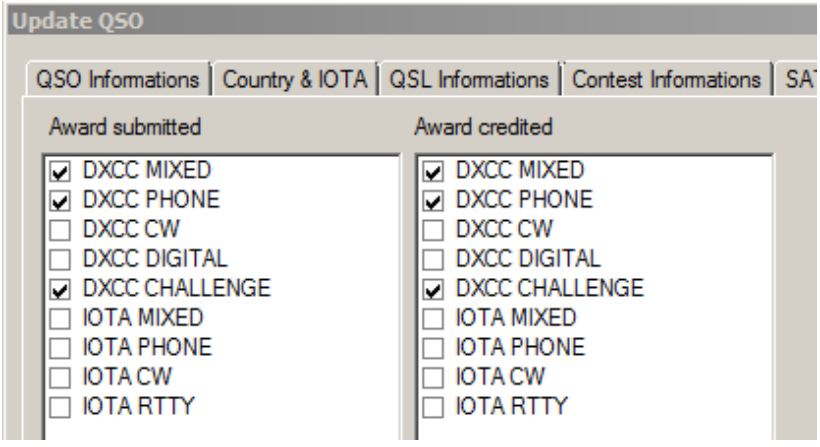
A point is gained for each band/country with only one point per band/country, i.e. Italy on 15M CW, Digital and Phone results in only one point for Italy.

Challenge Award display:



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

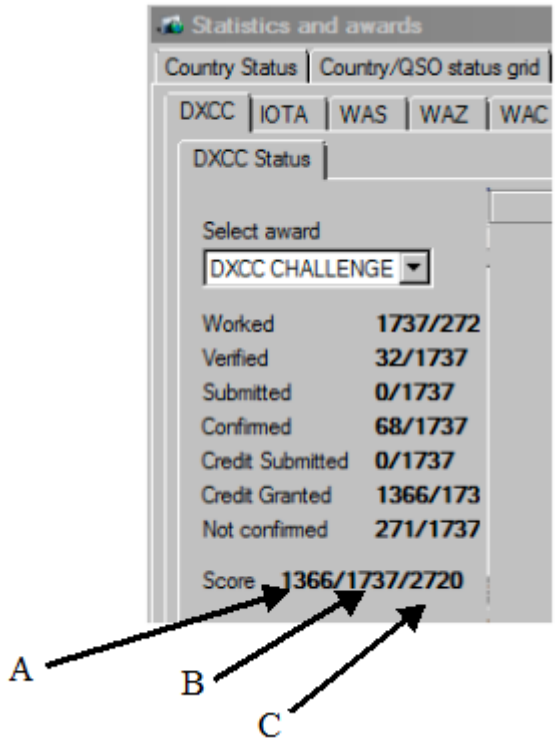
Setting the Challenge award status for a QSO:



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.

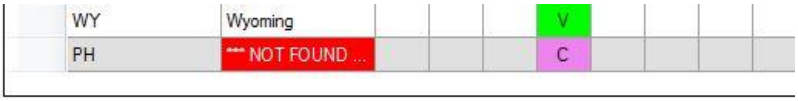
When a prefix is incorrectly used as a suffix e.g. K7PT/KH6, the same problems exist.

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"

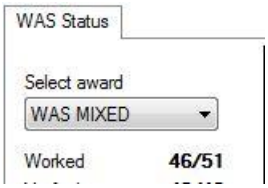
The user can click on this QSO in the "State not set" row to display the QSO/QSO's for editing.

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"



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.

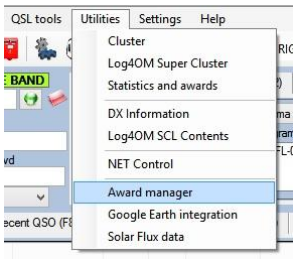


Awards Manager

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.

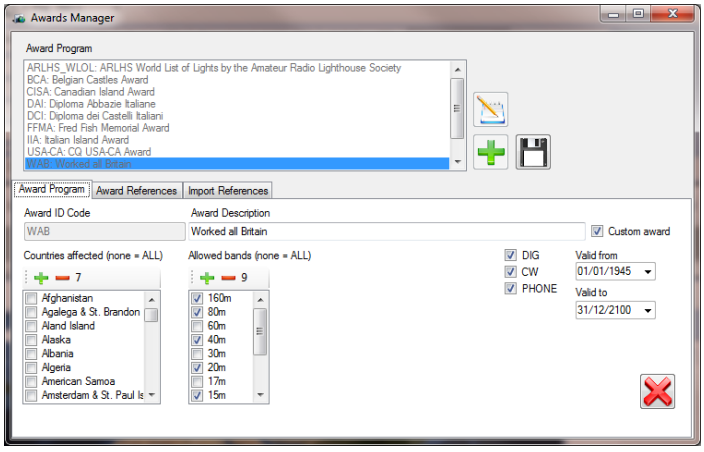
Award construction.

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 31st January 2013 – 3rd February 2013 and then again in the range 21st January 2014 – 9th 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;ActivationNote;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;Activati
onNote;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:

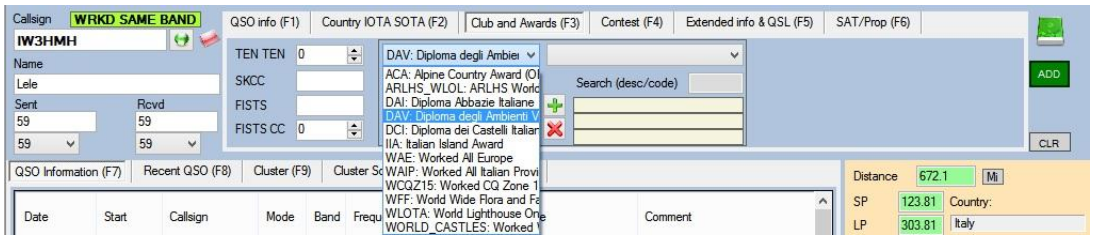
ARLHS_WLOL - World list of lights (lighthouses)
BCA - Belgian Castle Award
CISA - Canadian Island Award
DAI - Diploma Abbazie Italiane
DCI - Diploma Castelli Italiani
FFMA - Fred Fish Memorial Award
IIA - Italian Island Award
USA-CA
WAI – Worked all Ireland
WAB – Worked all Britain
WFF - World Flora 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.

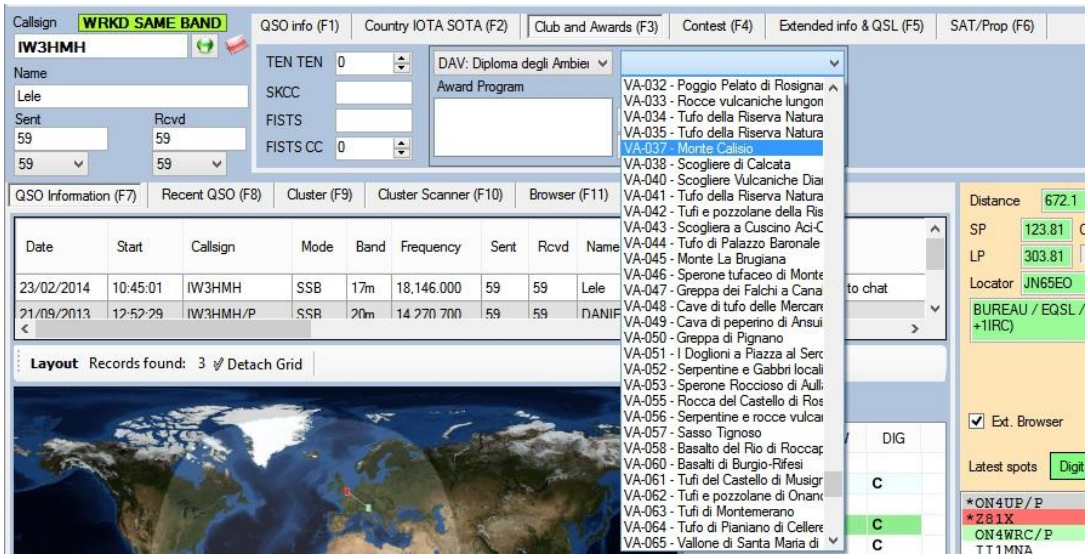
In action

Enter a call sign in the QSO input pane.

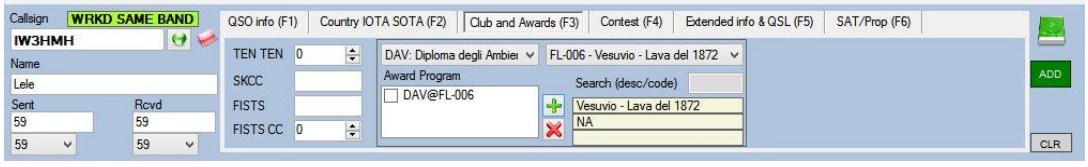
Click the “Award Program” drop-down menu in the Club and Awards F3 tab – *Only awards applicable to the country (According to the call sign entered), band, mode and valid date range entered in the input window will be displayed.*



Select the required award from the list - From the drop-down menu to the right of the “Awards Program” drop down select the required reference.



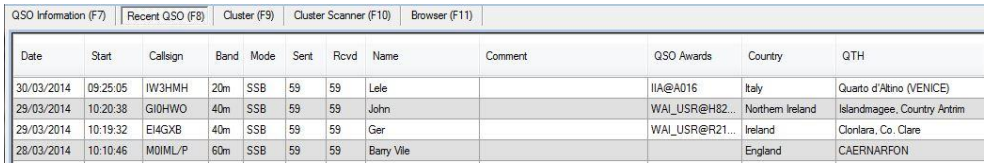
When the correct activation/reference has been selected click on the green plus sign “+” to add the award/reference to the “Current QSO Reference” box.



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.



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	GI0HWO	40m	SSB	59	59	John		WAI_USR@H82...	Northern Ireland	Islandmagee, Country 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	M0IML/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

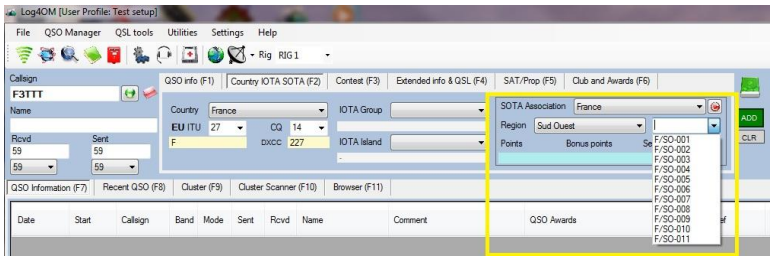
Logging a SOTA contact as a ‘Chaser’ or ‘Activator’ is a simple selection process, which requires no manual input by the user.

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

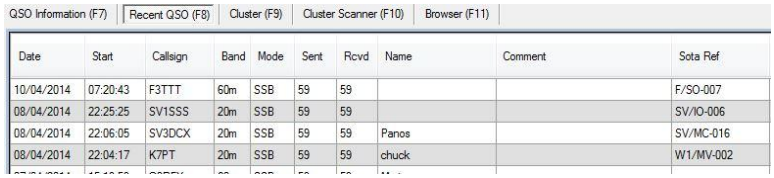
Recording a SOTA reference

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 od SOTA “References” for final selection.

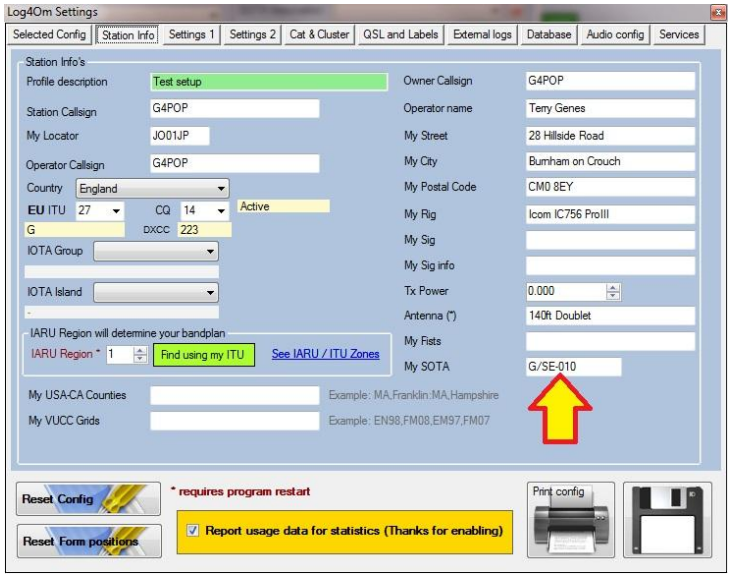


When the QSO is saved the SOTA reference is added to the “SOTA Ref” field.

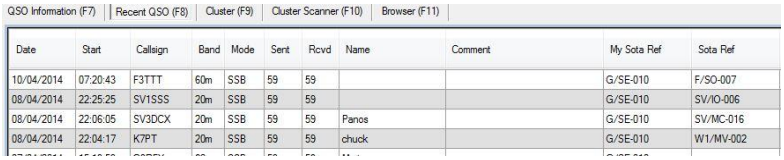


Date	Start	Callsign	Band	Mode	Sent	Rcvd	Name	Comment	Sota Ref
10/04/2014	07:20:43	F3TTT	60m	SSB	59	59			F/SO-007
08/04/2014	22:25:25	SV1SSS	20m	SSB	59	59			SV/IO-006
08/04/2014	22:06:05	SV3DCX	20m	SSB	59	59	Panos		SV/MC-016
08/04/2014	22:04:17	K7PT	20m	SSB	59	59	chuck		W1/MV-002

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.

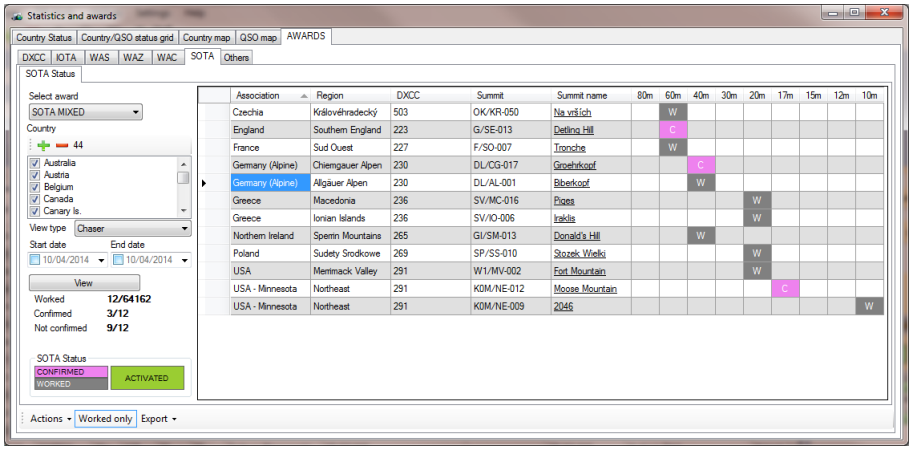


When a QSO is saved the “My SOTA Ref” is added to the “My SOTA Ref” field.



SOTA Award statistics

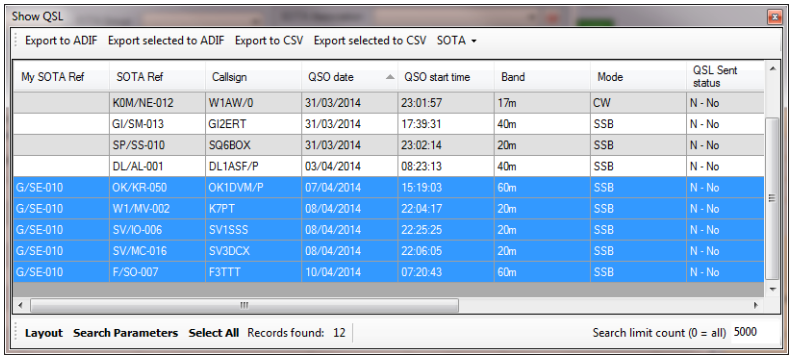
Summits worked and confirmed can be displayed by going to Utilities/Statistics & Awards/Awards/SOTA window. This window will display summits worked by Mode, Band, Association (Country), date range, worked & confirmed.



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.

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.

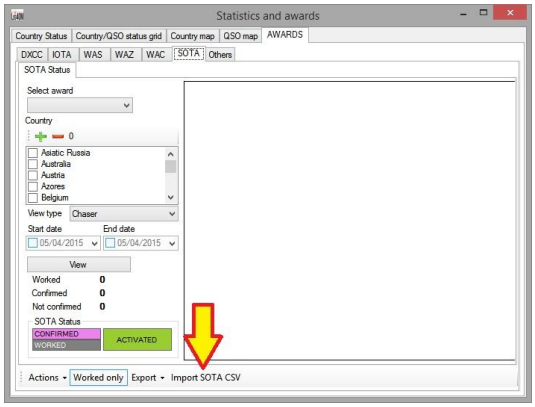


Downloading a "My Results" CSV file from SOTA

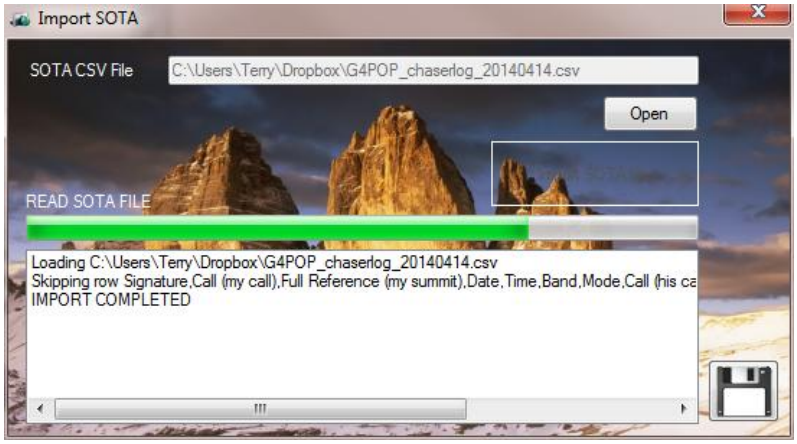
Log4om will update the users log from a "My results' CSV file downloaded from the SOTA website.

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 "Import SOTA CSV"
4. Select the downloaded file by clicking "Open" in the "Import SOTA" window.
5. Click "Merge/Import SOTA file"



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

Please note: The "Merge/Import" facility will update existing log entries and also add any missing entries.

Keeping the SOTA references current

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

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

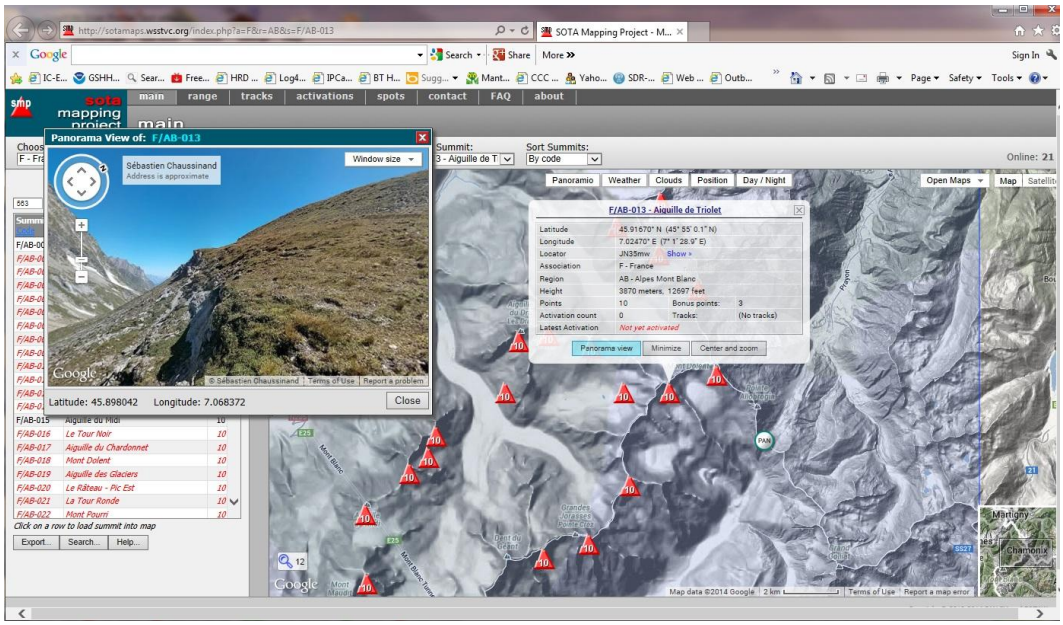
Save the file to the LogOM folder here: C:\users\YOUR USER NAME\AppData\Roaming\LogOM

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 endevours.

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.



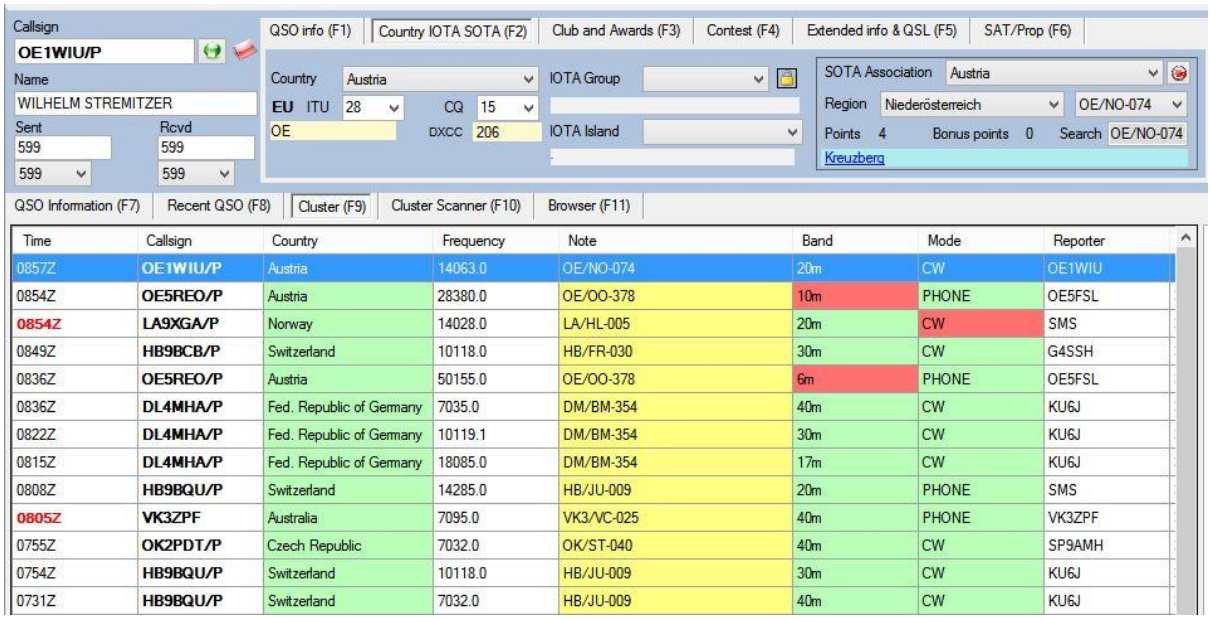
SOTA Cluster spots

The current SOTA Cluster address is elgur.dtdns.net, port 7300. - Check that in the Log4om cluster connection screen (Utilities/cluster) the check box “Cluster heartbeat enabled” is not checked. The SOTA MT do not want the 'Keep alive" system used by all regular logging software to be used with their cluster. The drawback is that should the cluster become disconnected there will be no Log4OM warning prompt, the cluster spots will just stop appearing.

There is a minimal login, after some blurb about the system users get a "login: " prompt where they type their callsign (This is automatically completed by the Log4om login script) This will timeout after 30secs with no response from the user and close the connection. After a callsign is sent, the cluster responds with the last 25 spots it has seen.

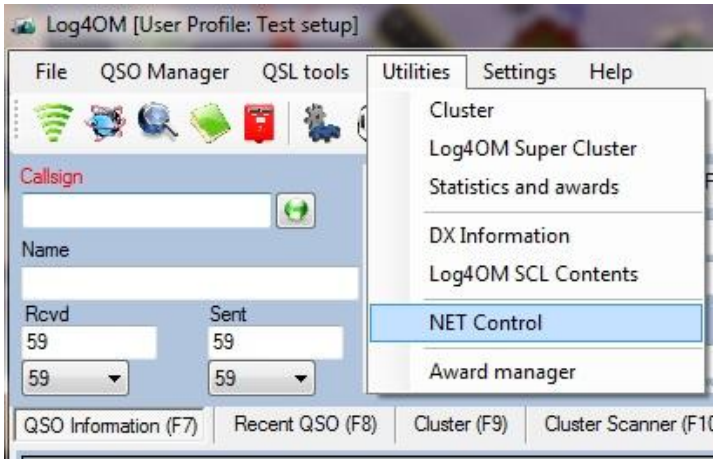
After that the system will send cluster spots like an ordinary cluster. However there is no input facility, it is a read-only cluster, i.e. you can see what is being spotted but you cannot send spots to the SOTA cluster.

When double clicking a SOTA cluster spot the SOTA association, region, summit ref. and summit name are automatically entered into the input fields together with of course all of the regular QSO data like call sign etc. This makes SOTA logging, as either and activator or chaser, extremely easy.

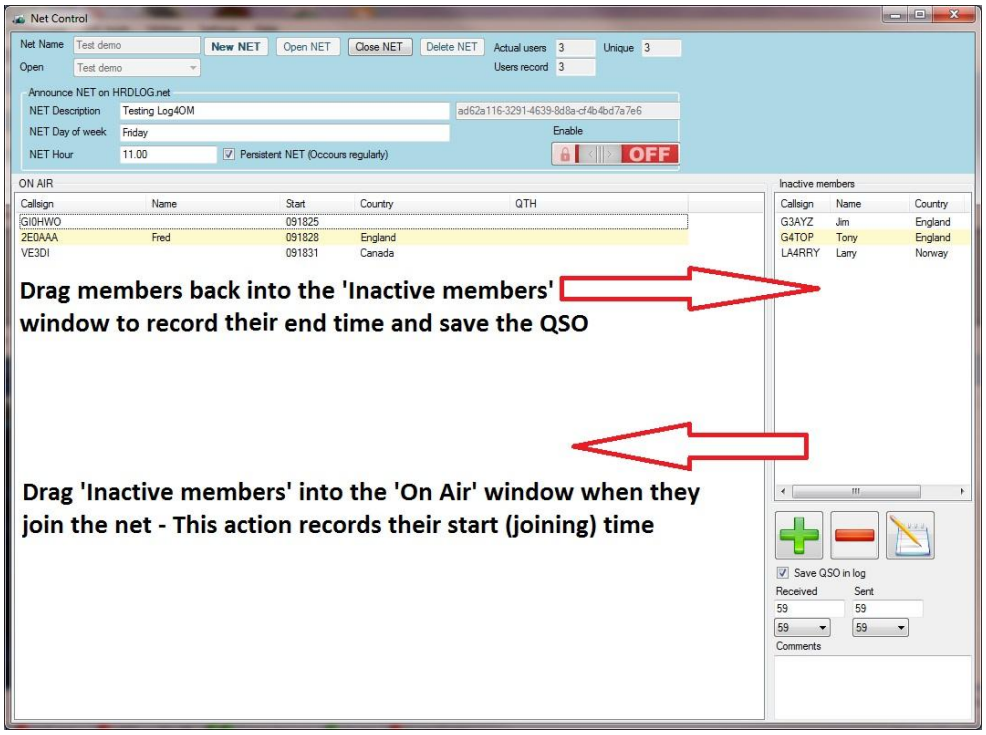


Time	Callsign	Country	Frequency	Note	Band	Mode	Reporter
0857Z	OE1WIU/P	Austria	14063.0	OE/NO-074	20m	CW	OE1WIU
0854Z	OE5REO/P	Austria	28380.0	OE/OO-378	10m	PHONE	OE5FSL
0854Z	LA9XGA/P	Norway	14028.0	LA/HL-005	20m	CW	SMS
0849Z	HB9BCB/P	Switzerland	10118.0	HB/FR-030	30m	CW	G4SSH
0836Z	OE5REO/P	Austria	50155.0	OE/OO-378	6m	PHONE	OE5FSL
0836Z	DL4MHA/P	Fed. Republic of Germany	7035.0	DM/BM-354	40m	CW	KU6J
0822Z	DL4MHA/P	Fed. Republic of Germany	10119.1	DM/BM-354	30m	CW	KU6J
0815Z	DL4MHA/P	Fed. Republic of Germany	18085.0	DM/BM-354	17m	CW	KU6J
0808Z	HB9BQU/P	Switzerland	14285.0	HB/JU-009	20m	PHONE	SMS
0805Z	VK3ZPF	Australia	7095.0	VK3/VC-025	40m	PHONE	VK3ZPF
0755Z	OK2PDT/P	Czech Republic	7032.0	OK/ST-040	40m	CW	SP9AMH
0754Z	HB9BQU/P	Switzerland	10118.0	HB/JU-009	30m	CW	KU6J
0731Z	HB9BQU/P	Switzerland	7032.0	HB/JU-009	40m	CW	KU6J

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.

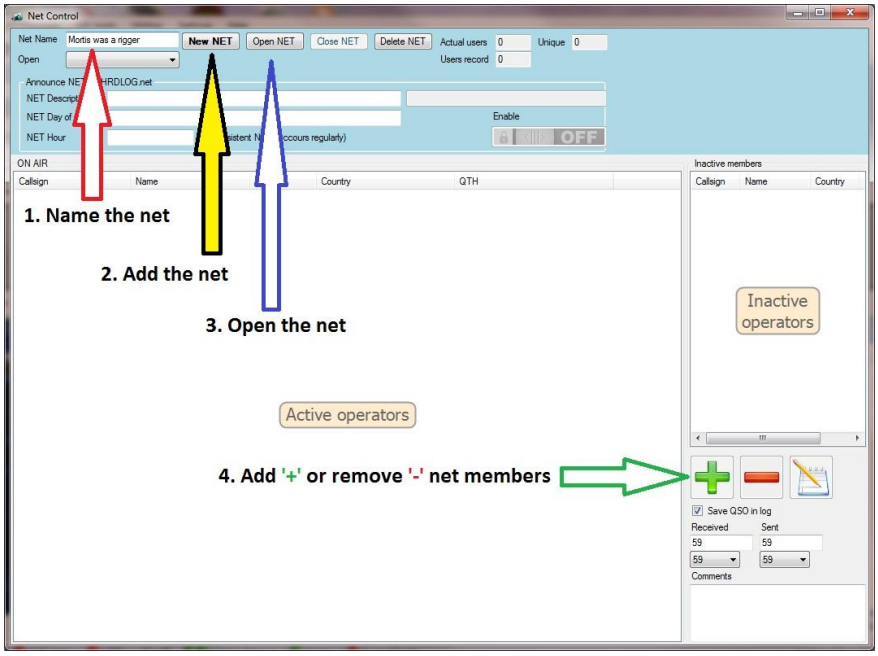
Adding nets and members

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).



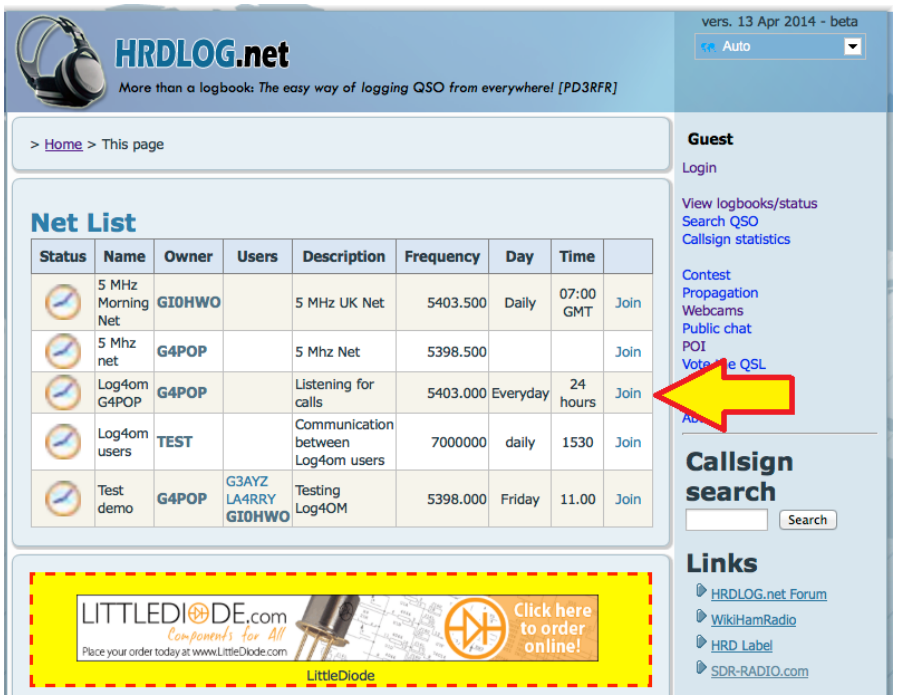
4. Call signs of new members may be added or removed at any time by clicking the green 'Add' button or red 'Minus' button.

Announcing nets on line with HRDLog.net

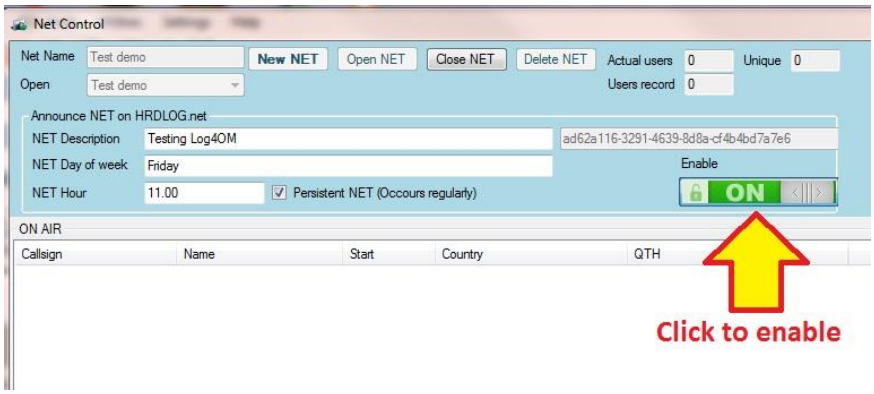
To ensure maximum visibility of a net it is possible to publish details of a net on the Internet by using the HRDLog.net "Net' display facility. Members of HRDLog.net can view all current nets in the HRDLog.net web page and join a net by clicking the "join' button.

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.



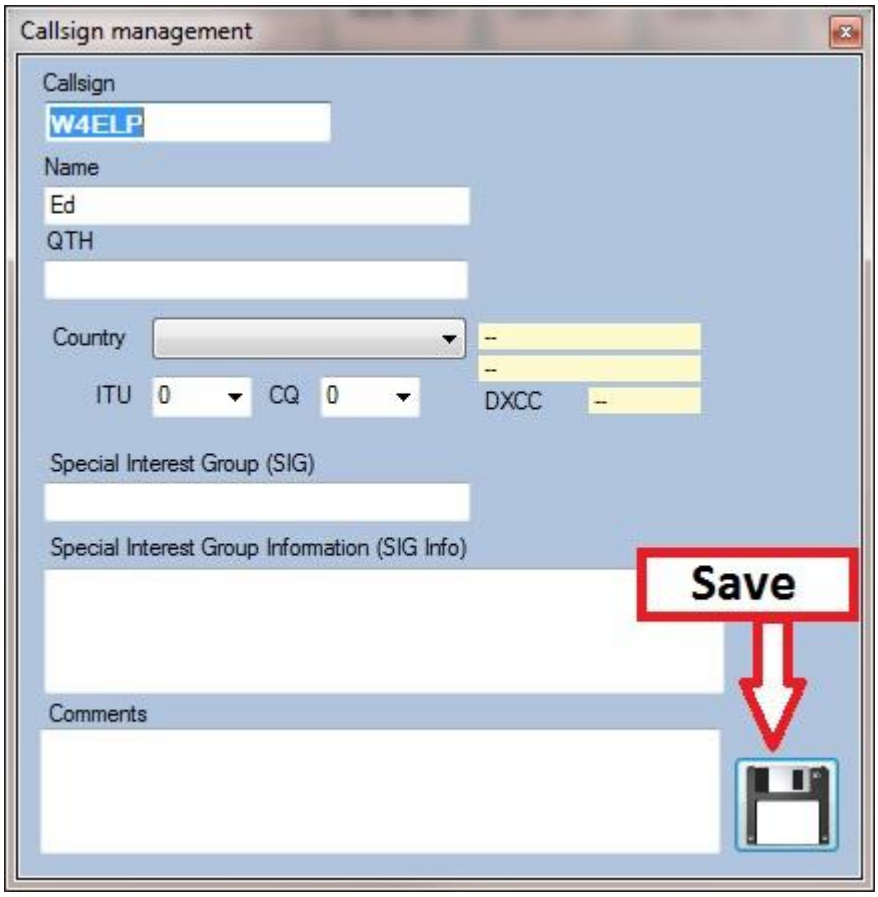
To announce a net on line first open the net, fill in the optional net information fields and click the "Enable" button.



Call sign Management

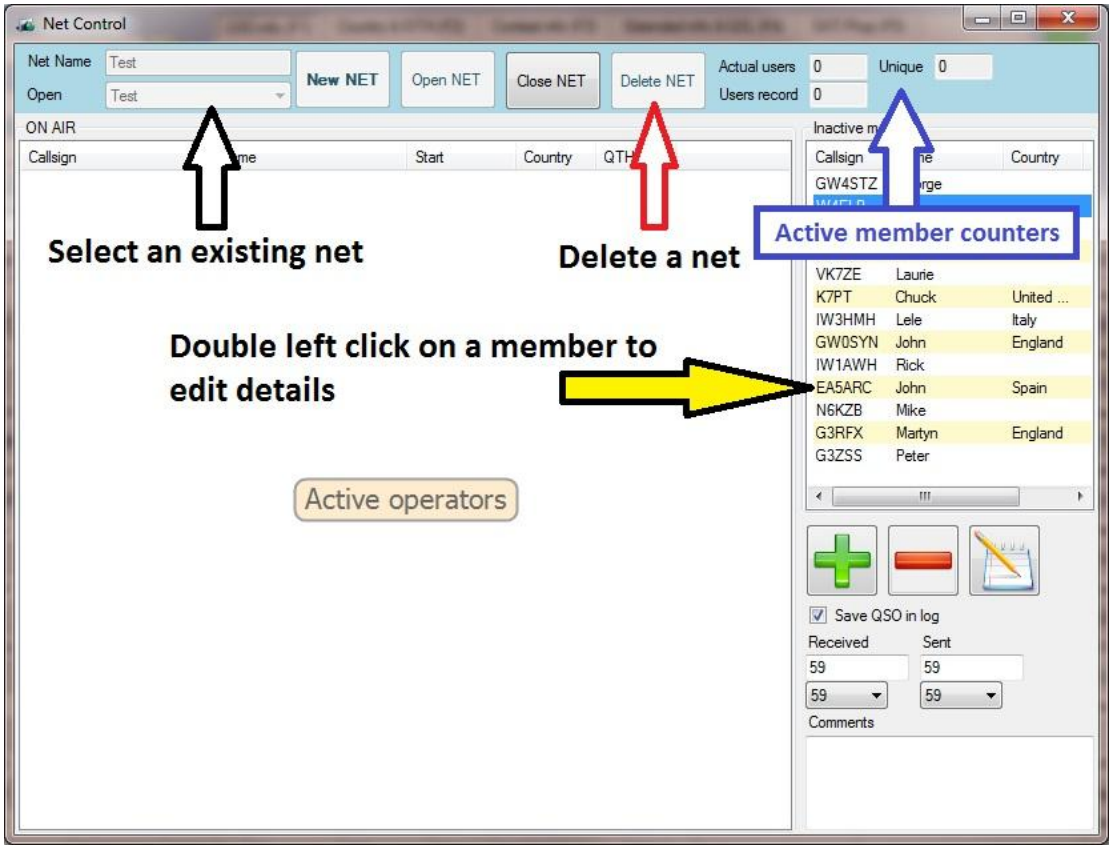
Double click on any call sign in the 'On Air' screen to open the 'Call sign Management' screen. Then insert any details required and click on the Save Icon (indicated by the red arrow in the screen below).

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).



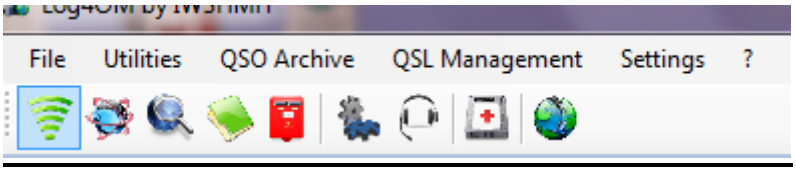
Once the details of a member have been added click the save button as shown in the graphic above.

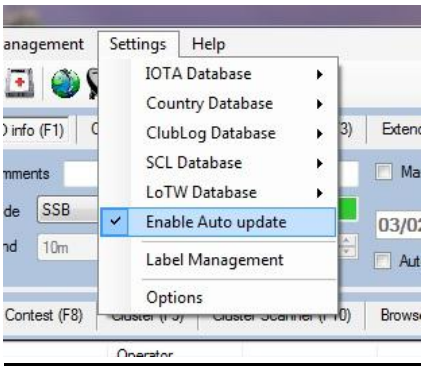
The functions of the other Net Control buttons are shown below.



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.

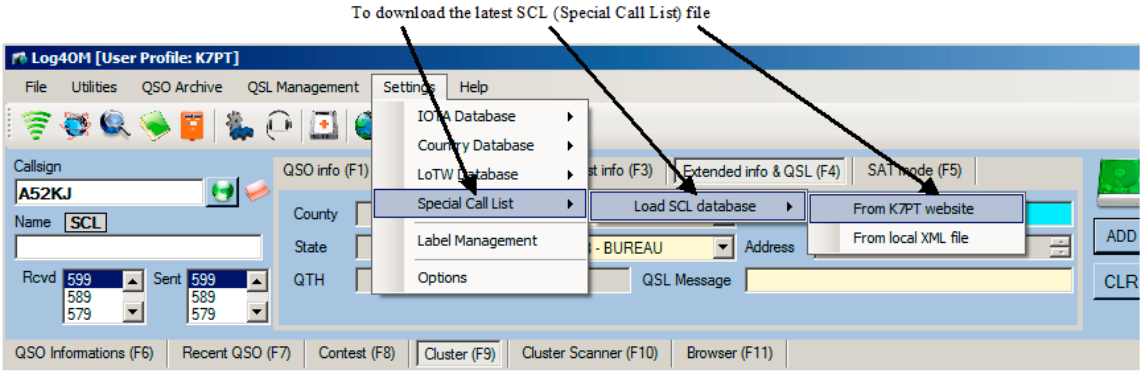
Special Call List (SCL)

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.

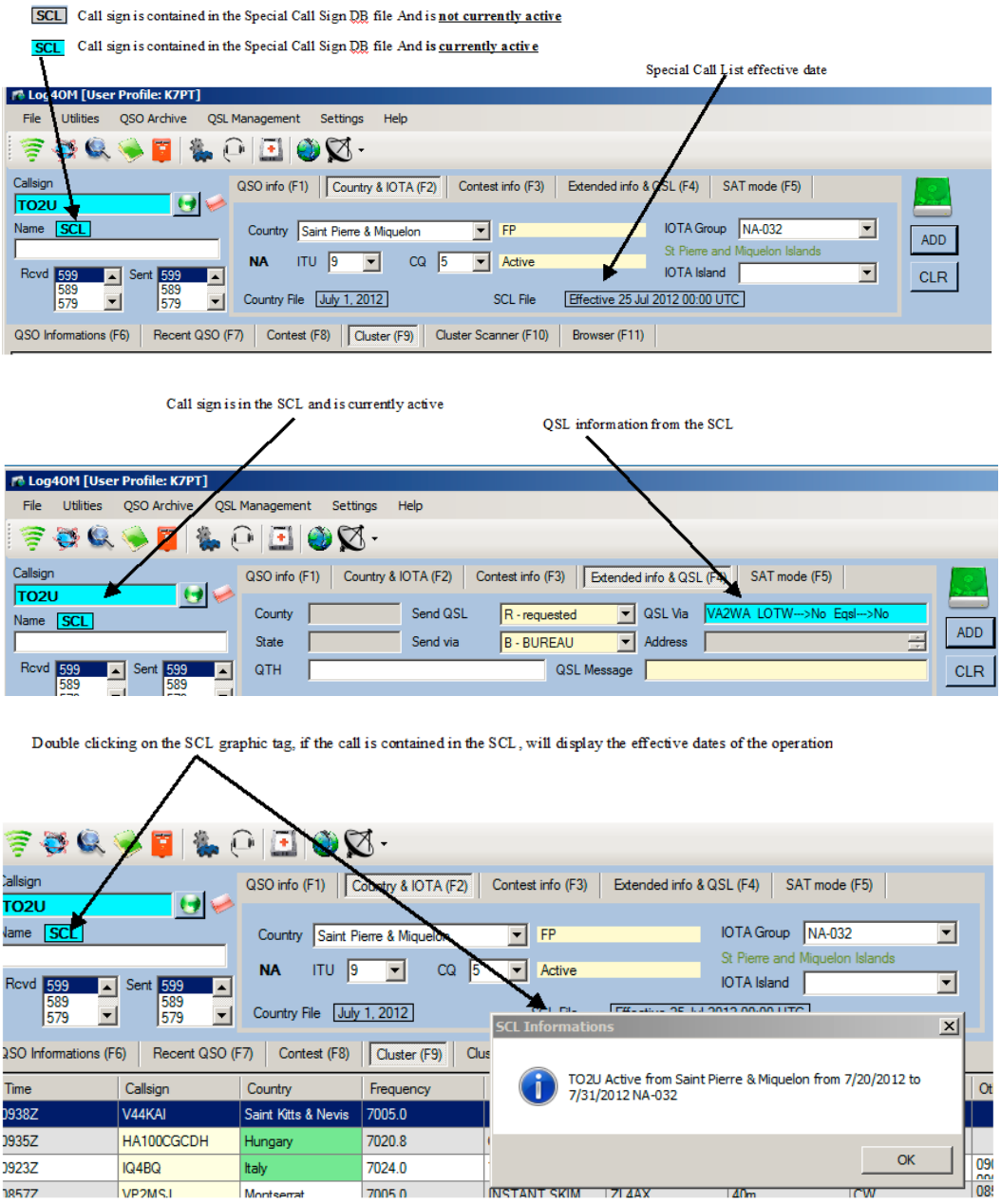
The database is updated daily by K7PT in concert with IW3HMH and G4POP, so the user is advised to update the SCL DB every day to insure accurate logging.

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

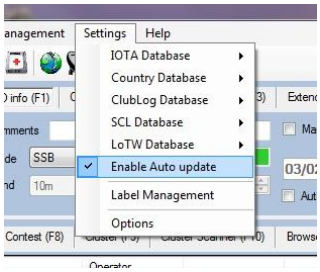
Log4OM is able to update the information for LOTW users from a text file or, automatically, from the LOTW HB9ZA web site, with the permission of the author.

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

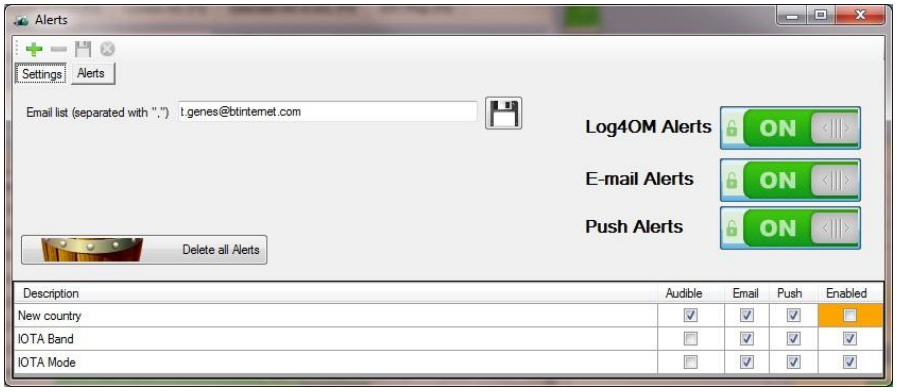
Select ‘Auto Update’ to regularly update the data files. The frequency of update can be set in the ‘Settings 2’ tab of the ‘Options’ menu.



-

Alerts

See the section on setting alerts

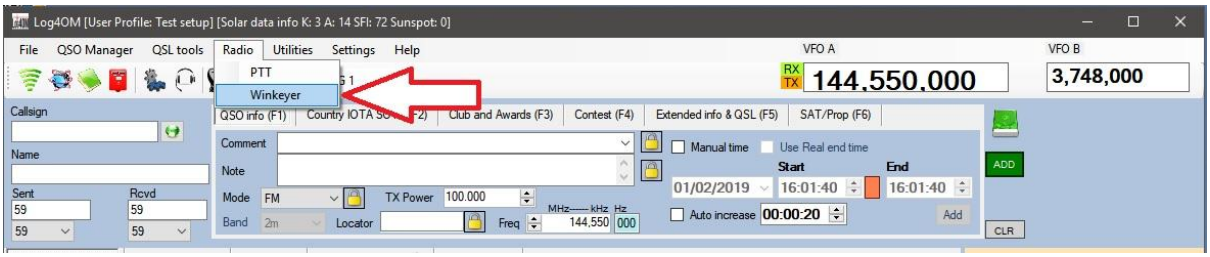


Winkeyer

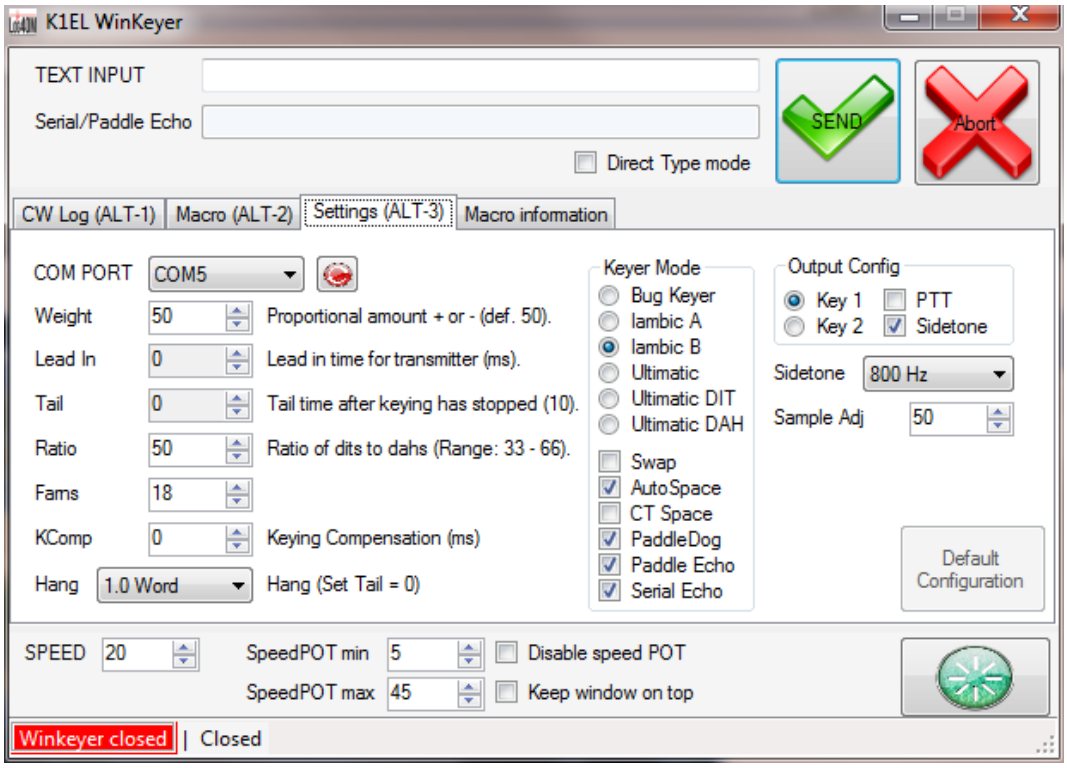
The integrated K1EL Winkeyer support in Log4om provides full control of Winkeyer hardware for all Winkeyer versions.

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

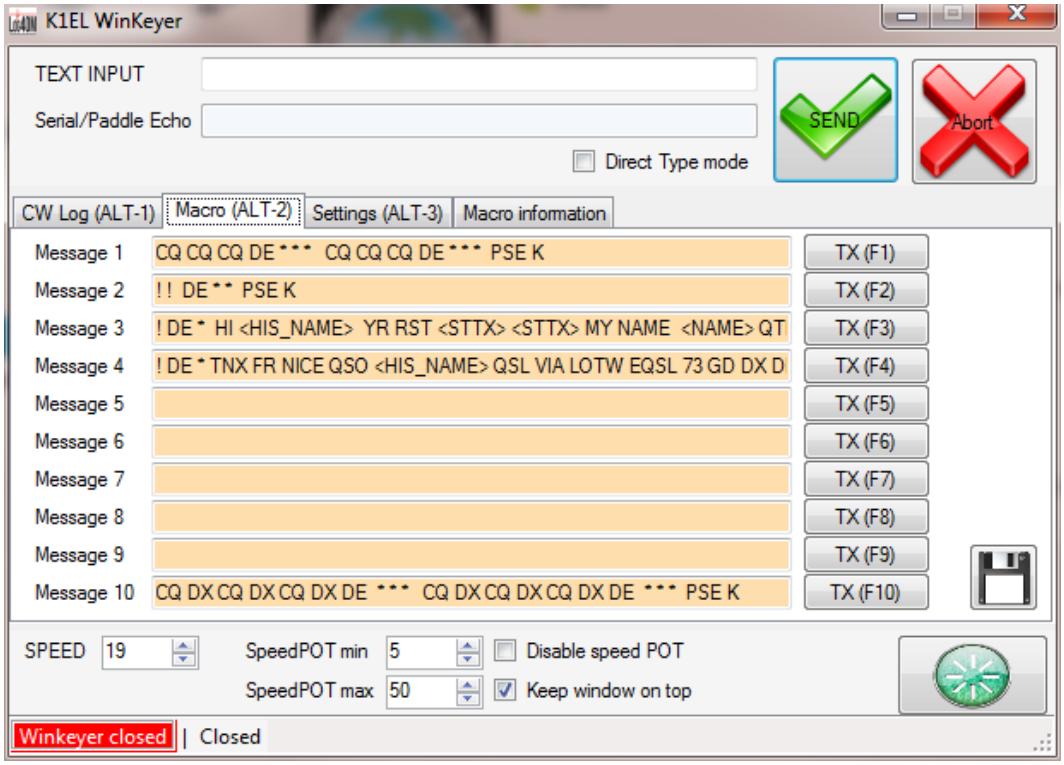
To open the Winkeyer dialog select 'Winkeyer' from the 'Radio' drop down menu.



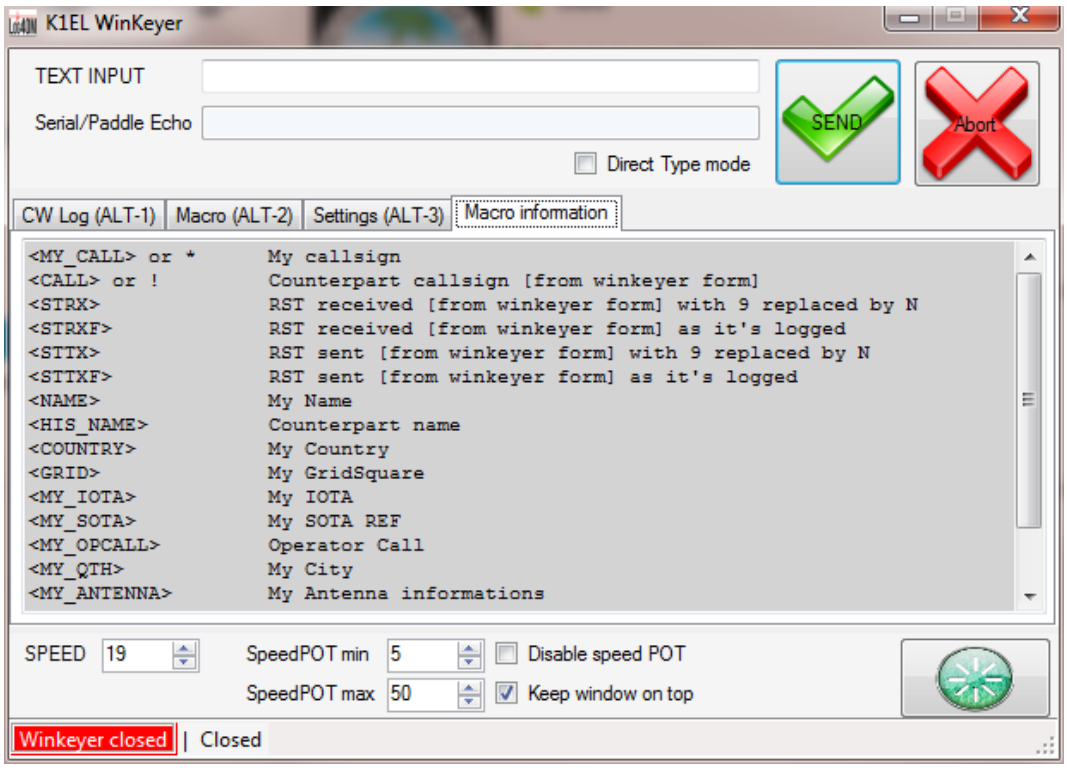
When the dialog window opens click the “Settings (ALT-3)” tab to select the required Winkeyer set up and choose the COM port to which the Winkeyer is connected. For Winkeyer settings information please consult the Winkeyer K1EL web site and user guide.



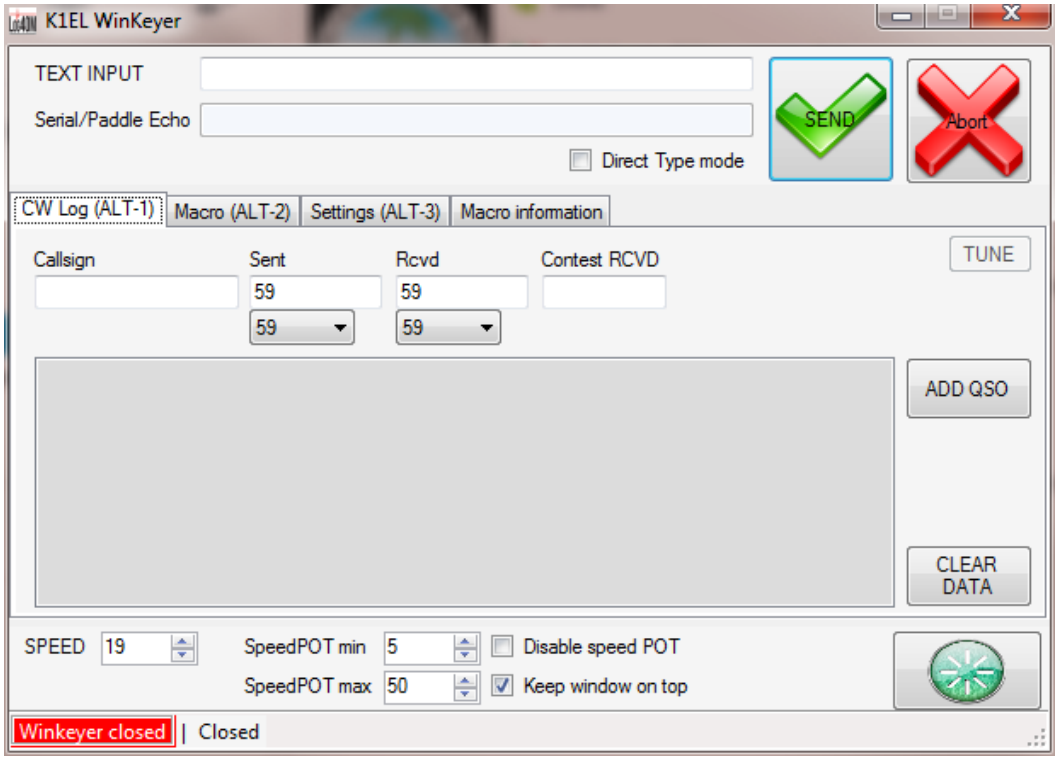
Macros can be designed in the Macro (ALT-2) tab



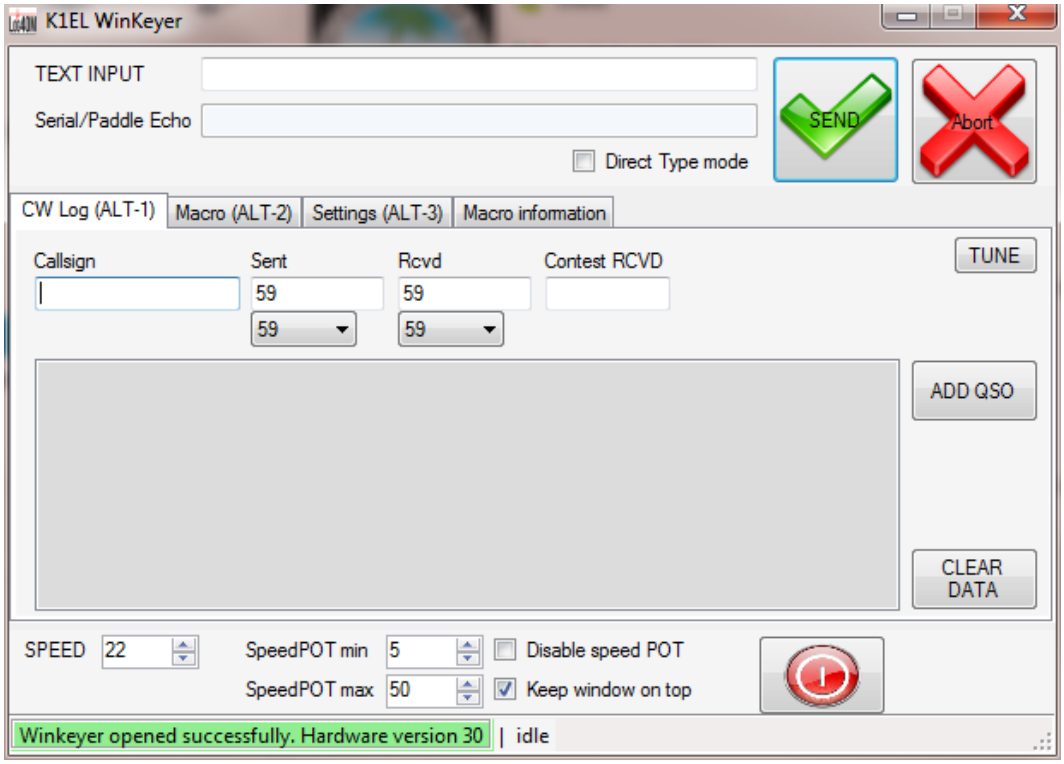
Use of the Data Calls listed on the “Macro Information” tab in macros can simplify macro creation and use



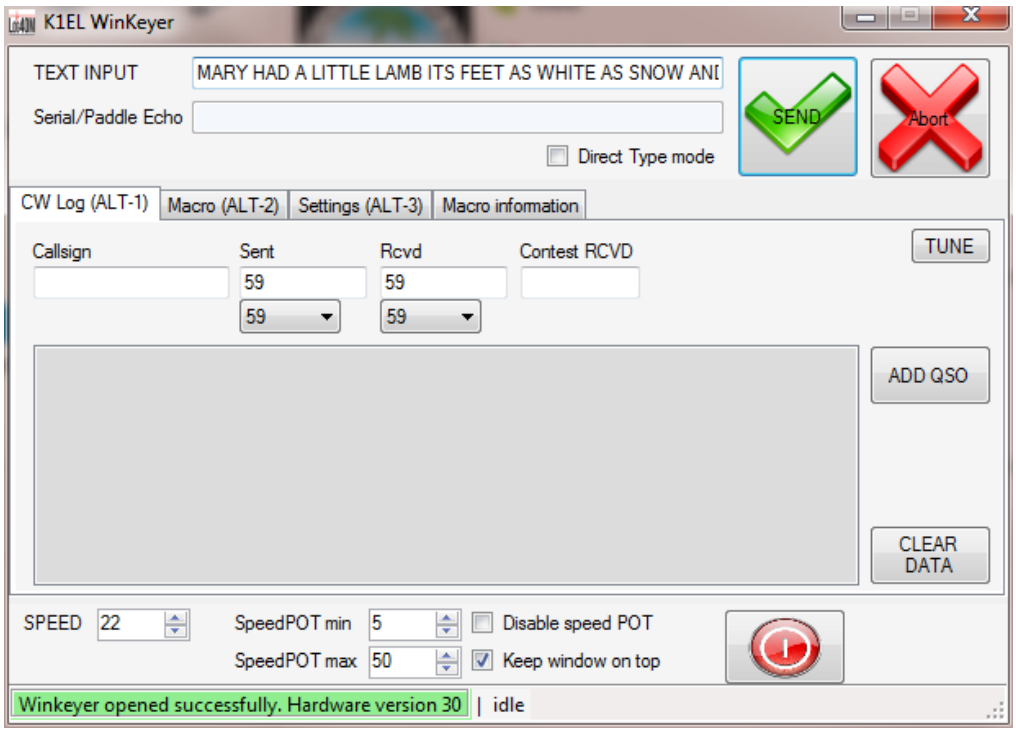
When the set up is complete all operating is done from the “CW Log (ALT-1)” tab



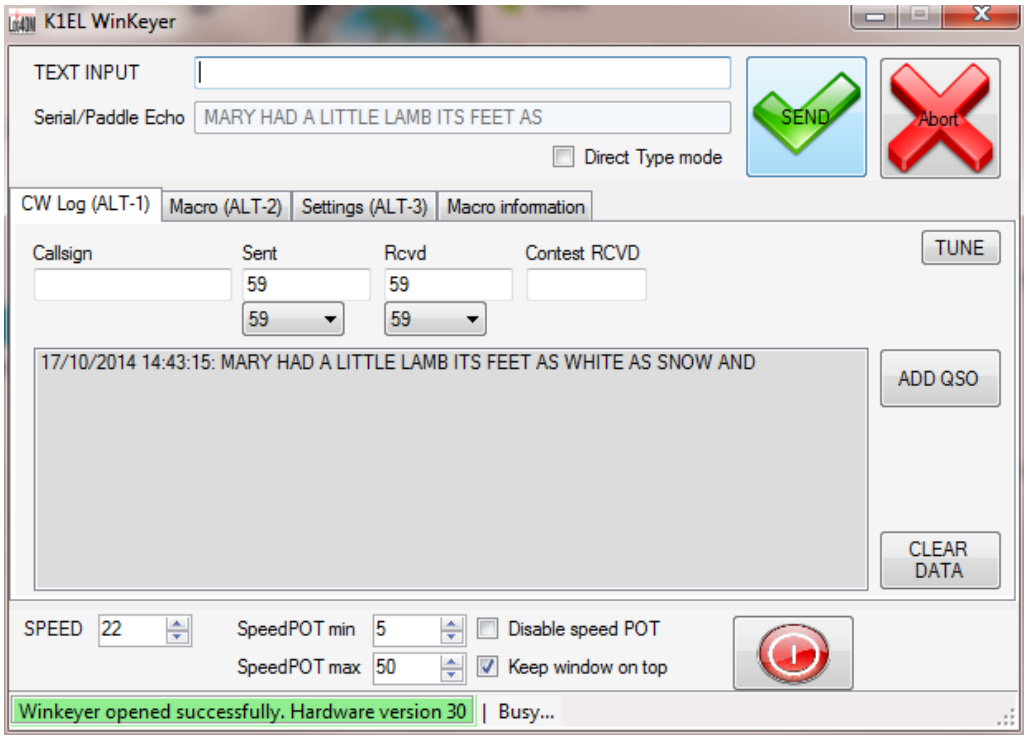
To connect to the Winkeyer, click on the Green button at the bottom right hand corner of the window. The message in the lower left will change to green and indicate that the Winkeyer is open and show the hardware version as below.



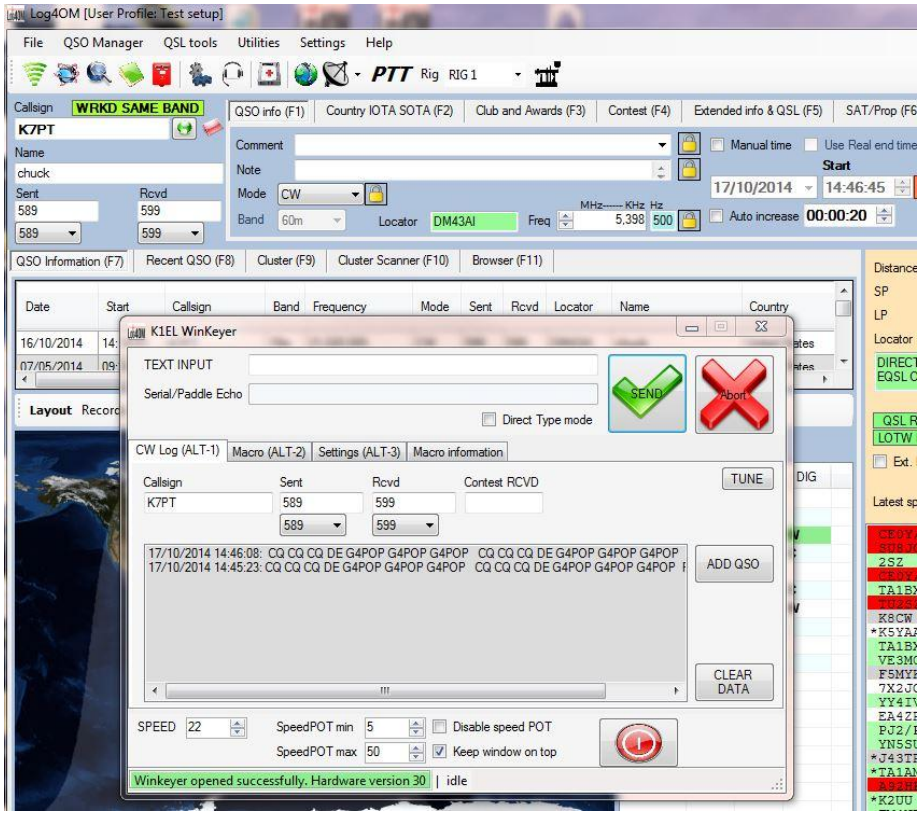
The message to be sent can be typed into the “TEXT INPUT” field at the top and either sent immediately if the “Direct type mode” box is checked or by clicking the “Send” button and sending can be aborted by clicking the “Abort” button



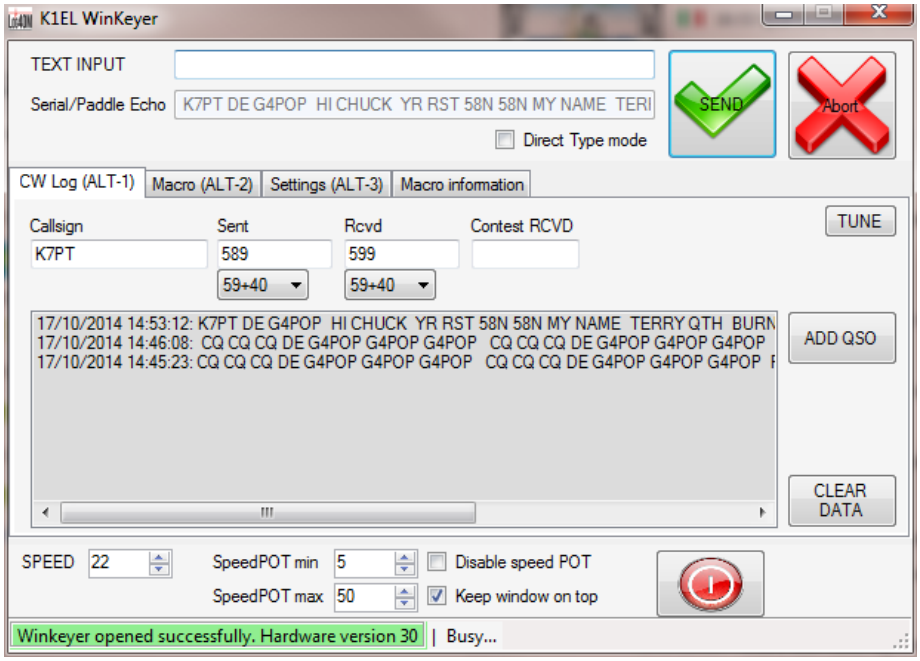
Text sent is displayed in the lower message box and if “serial Echo” is enabled it is displayed as it is sent in the “Serial/Paddle Echo” field.



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.

Miscelaneous

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.

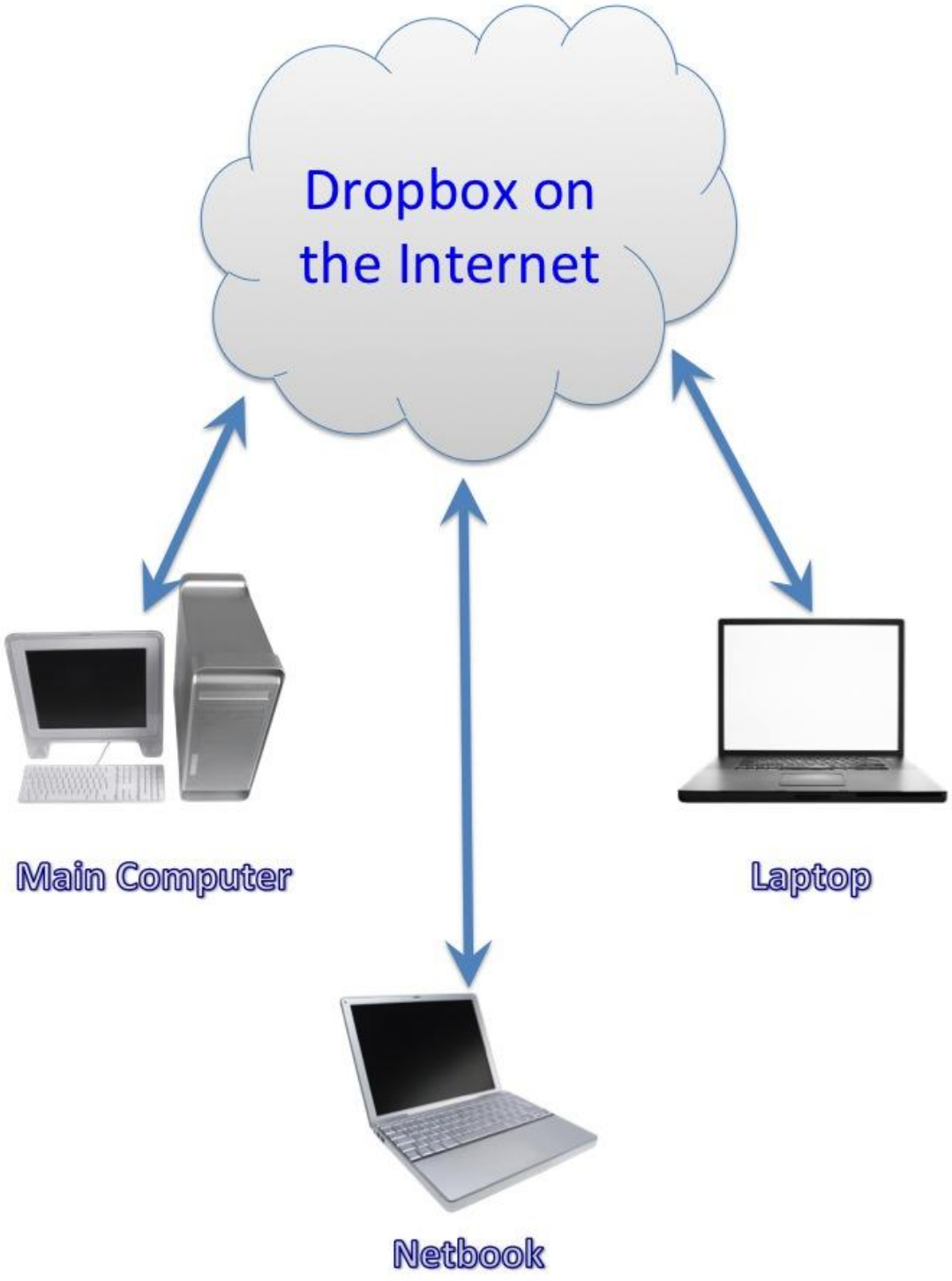
- The following day using the laptop the user updates the Log4OM status for 100 QSL cards that came from the bureau and also 24 cards that were sent out - Dropbox synchronizes to the other two computers.

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:

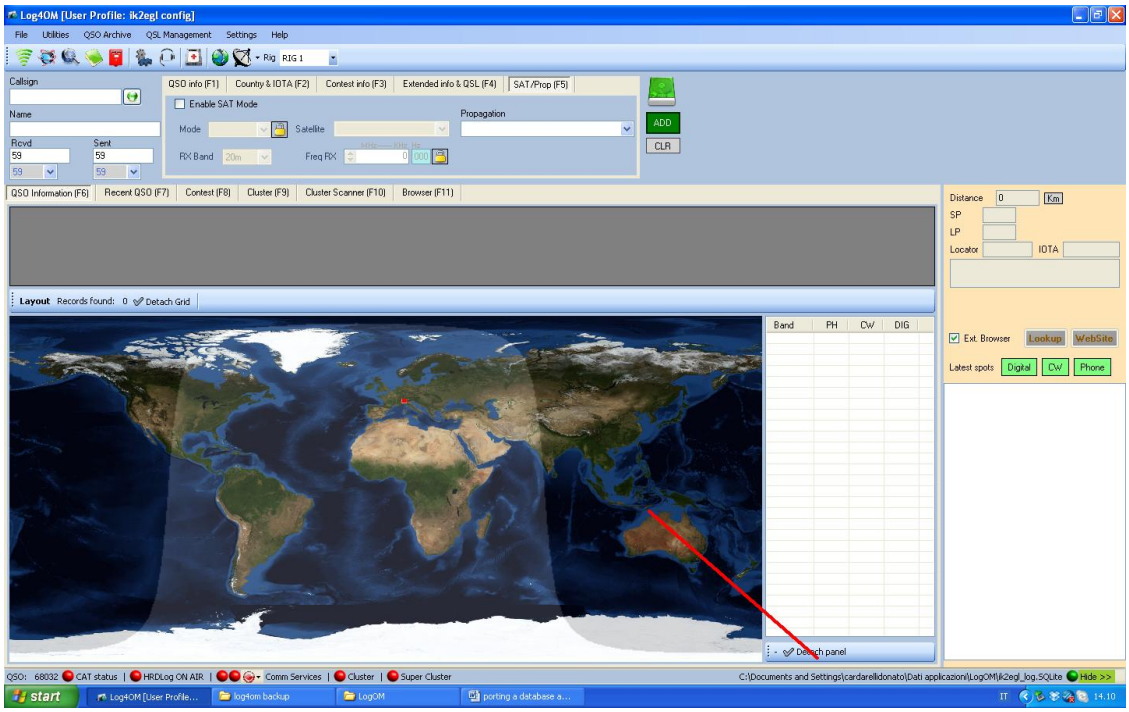
a) All logbook data is stored in an SQLite database file e.g. *Mylogbook.SQLite*.
b) The Log4OM configuration is stored in the config.xml file and communicatorconfig.xml file and all user-modified files have names that end with **"_user."**
c) The installation of the software on the destination computer 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

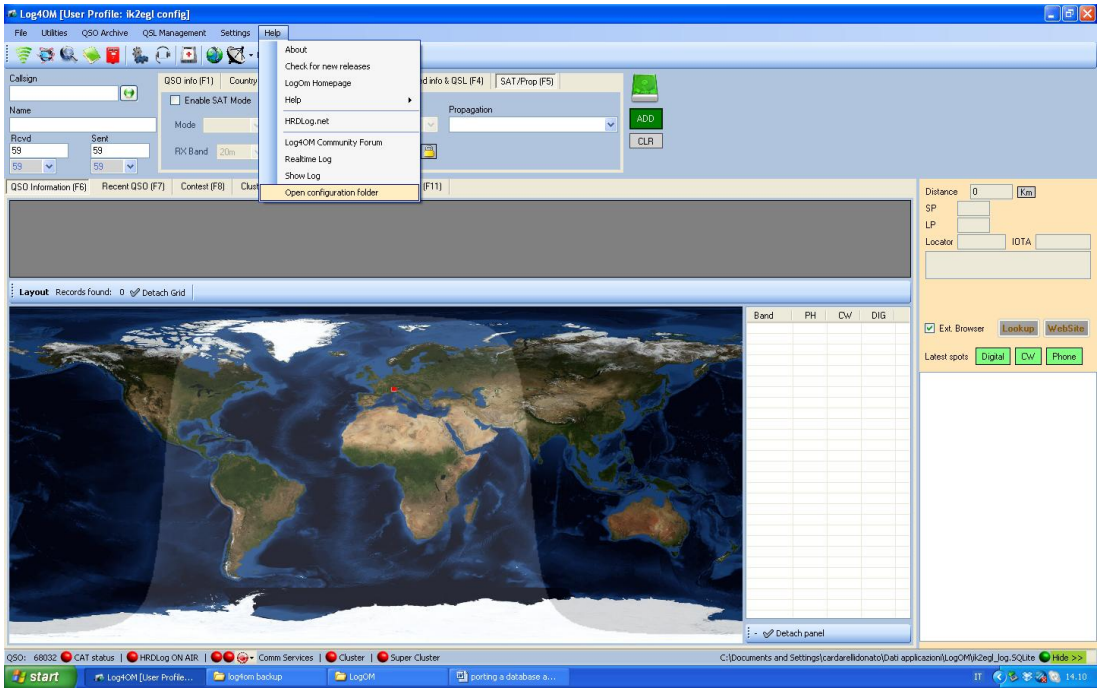
- Locate the logbook database file mentioned in 'A' above which can be identified in the LOG4OM main window at the bottom right corner (See below). Take note of the location.

- 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

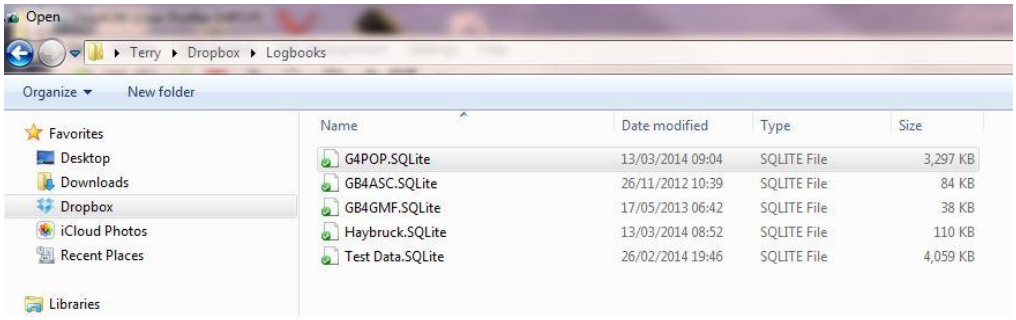
All above information can be found in the Log4OM 'Options/Settings 2 and 'Options/External logs tabs

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'

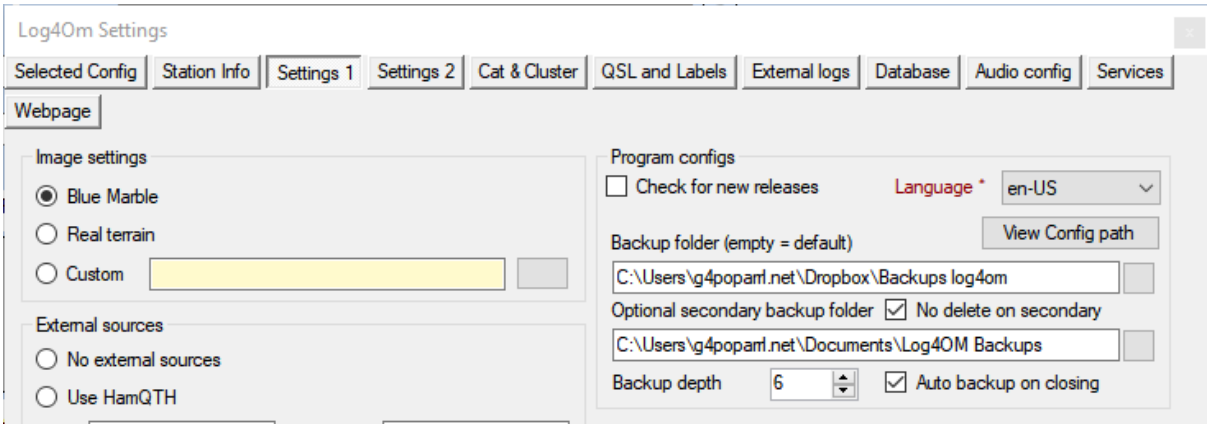
8. Navigate to the location where the logbook SQLite file was copied and select it.



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.

Restoring Log4OM after a crash or failure

Backup files are saved every time Log4OM is closed providing the user has selected that function in the options/settings 1 menu as shown below.



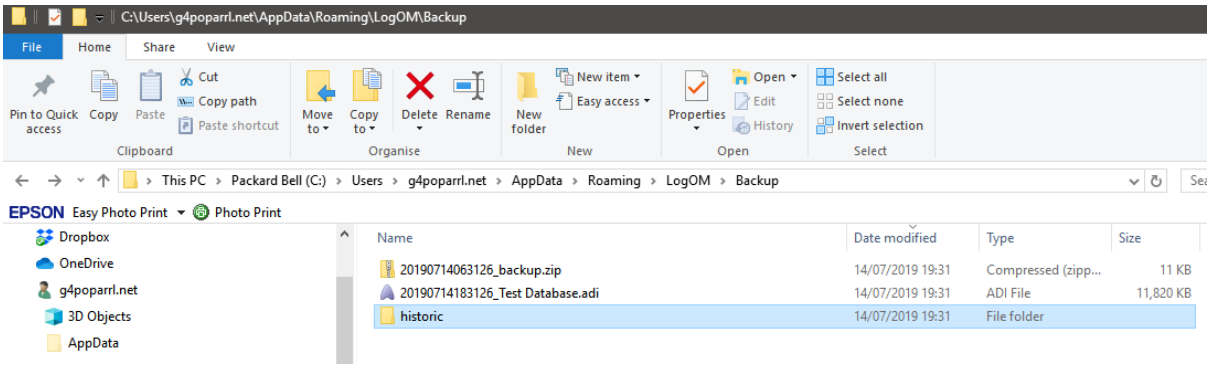
The backup files contain copies of the following critical files.

- ADIF file of the database
- Main Configuration file
- Log4om user grid layout arrangements
- Cluster user logon script

The files are saved in a default folder at

C:\Users\YOUR USER NAME\AppData\Roaming\LogOM\Backup

Unless a specific folder(s) have been selected in the options/settings 1 menu



If no backup has been set.

There is a 'Historic' file that saves the previous months set up files to ensure that the bulk of date is preserved and only the time elapsing from the end of the month saved is lost.

The 'Historic' files are saved to:

C:\Users\YOUR USER NAME\AppData\Roaming\LogOM\Backup\historic

Restoring data

To restore the original configuration to a new installation in the event of a critical loss situation where a restart results in a clean install follow these steps.

1. Install the latest version of Log4OM - Do not start the program
2. Locate the backup files listed and displayed above.
3. Unzip the Backup ZIP file and copy/save the resulting files to the new installation folder as below and overwrite the existing files.

   C:\Users\YOUR USER NAME\AppData\Roaming\LogOM

4. Start the new Log4OM installation

Once the configuration has been restored it is possible that the ??????.SQLite database may not be found by the program, especially if it has been save to another location or has been lost. In that event do a search for the file and if found go to File/Open database and select and open it.

Alternatively create a new SQLite database and once created import the back up ADIF file that was found with the other backup files earlier.

Always use the latest backup files and ADIF file available, identified by the Windows date stamp alongside the file name.

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.

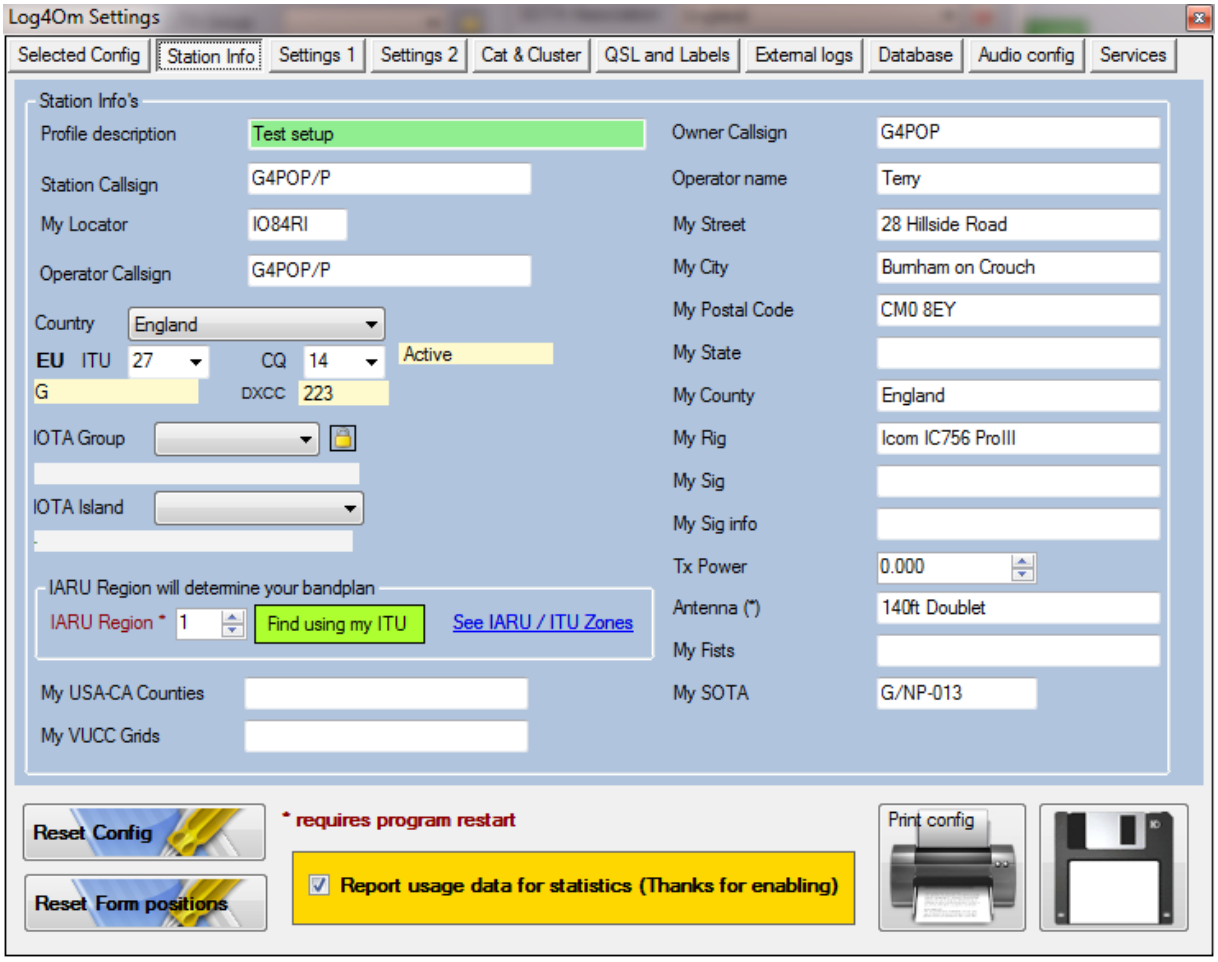
In the station info tab change the following as required

‘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

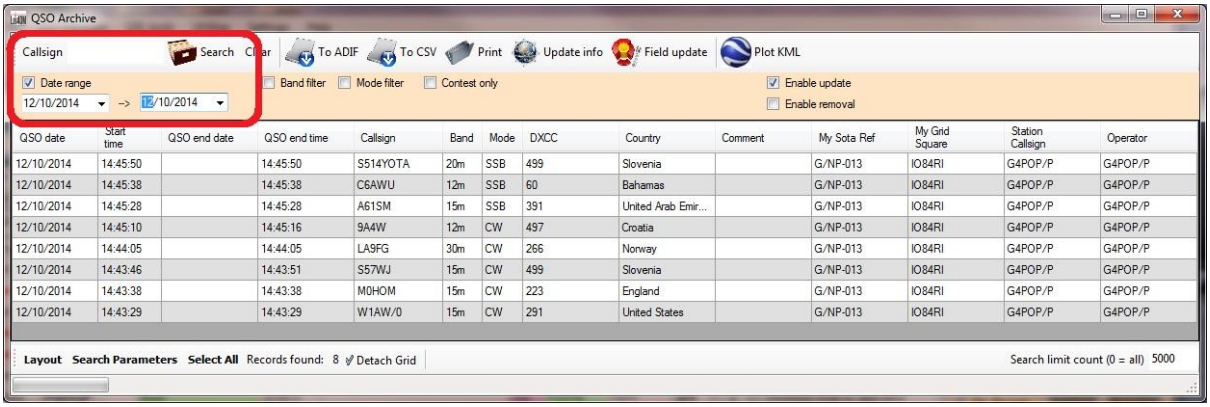
As below



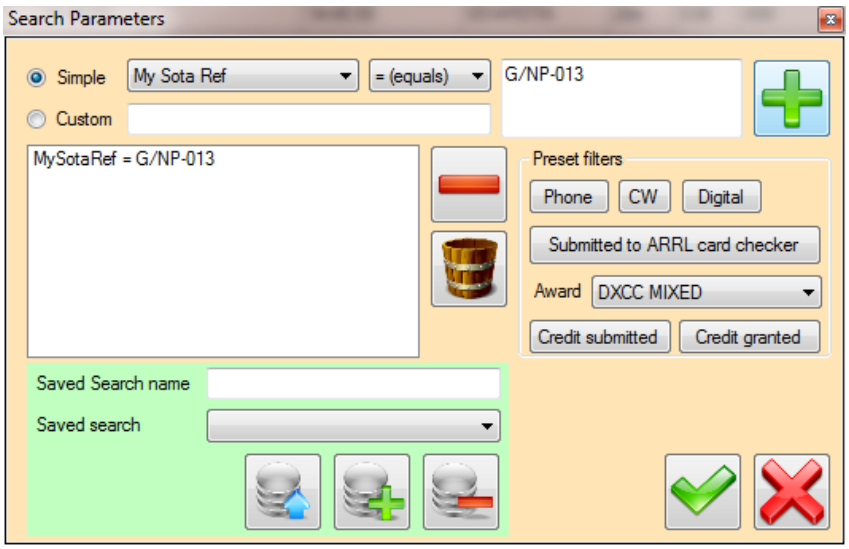
Now each QSO that is made from this location will have the appropriate information recorded in the logbook database for future retrieval.

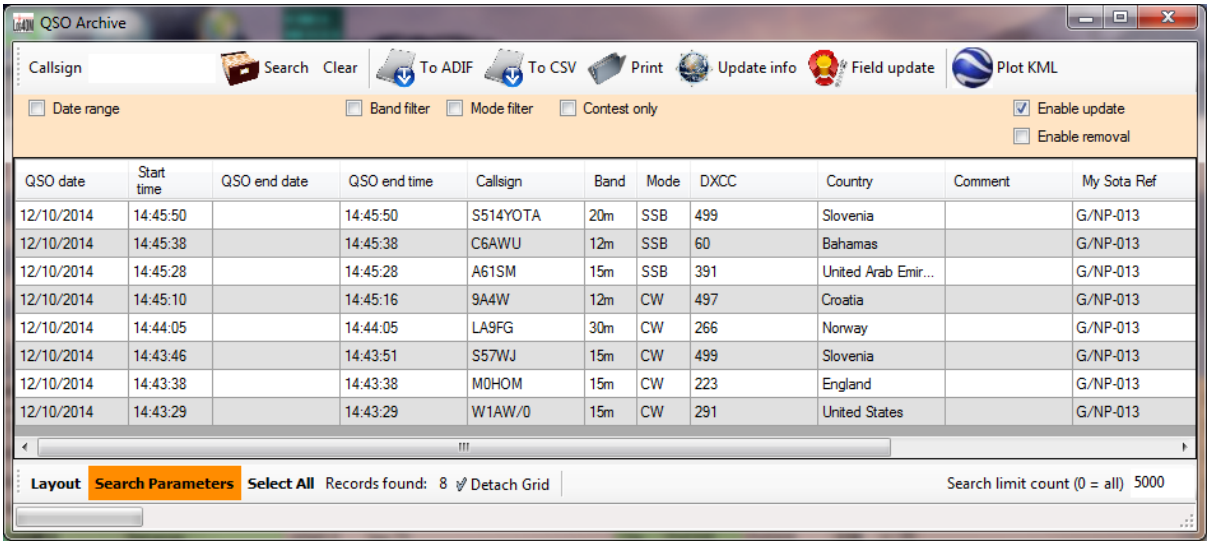
It is possible to retrieve those QSO that were made at the /P location in many ways in the QSO Archive manager, QSL Manager and Recent QSO windows as follows

By the Date that the portable operation n took place in the Archive manager by using the ‘Date range’’ facility as below.

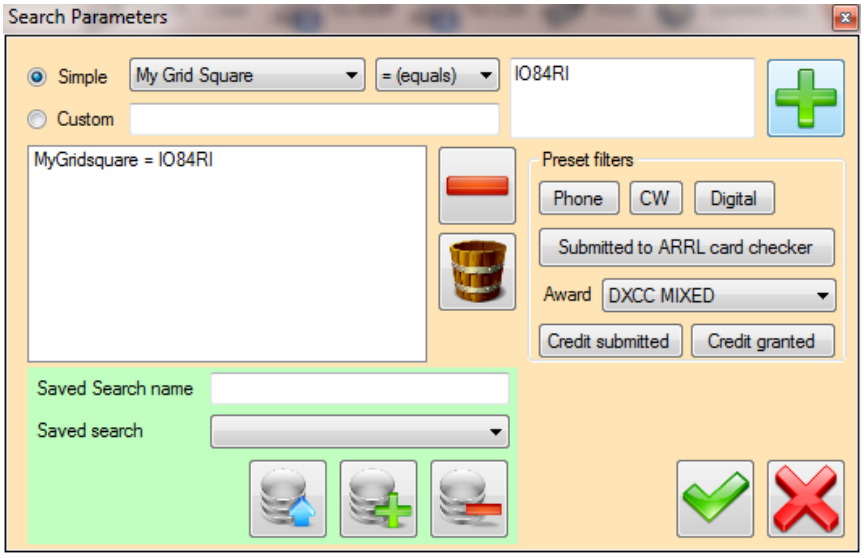


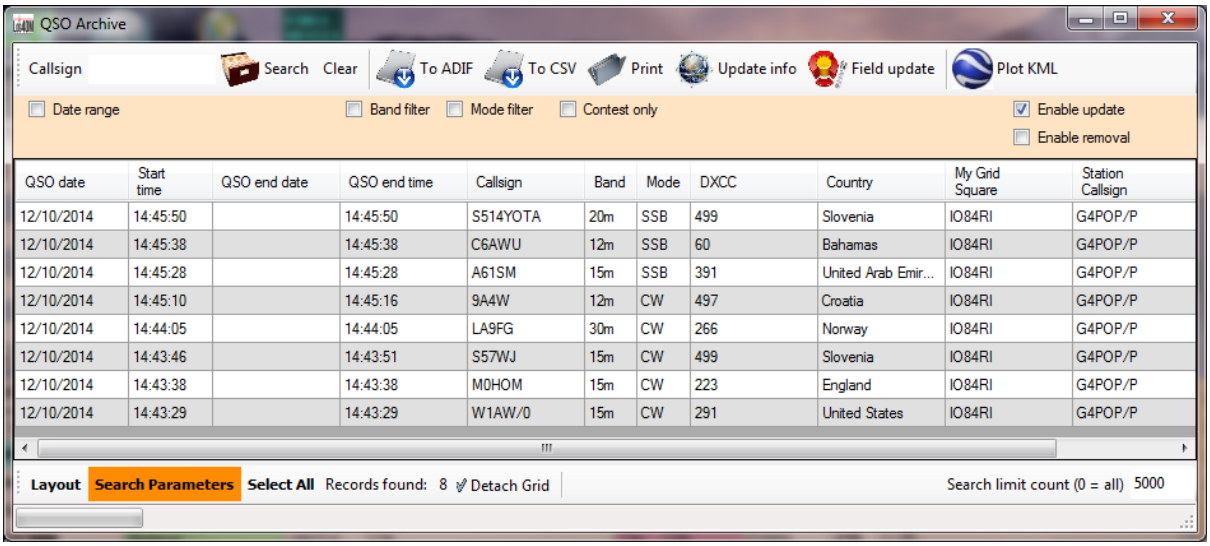
By the ‘My SOTA Ref’ using the ‘Search Parameters’



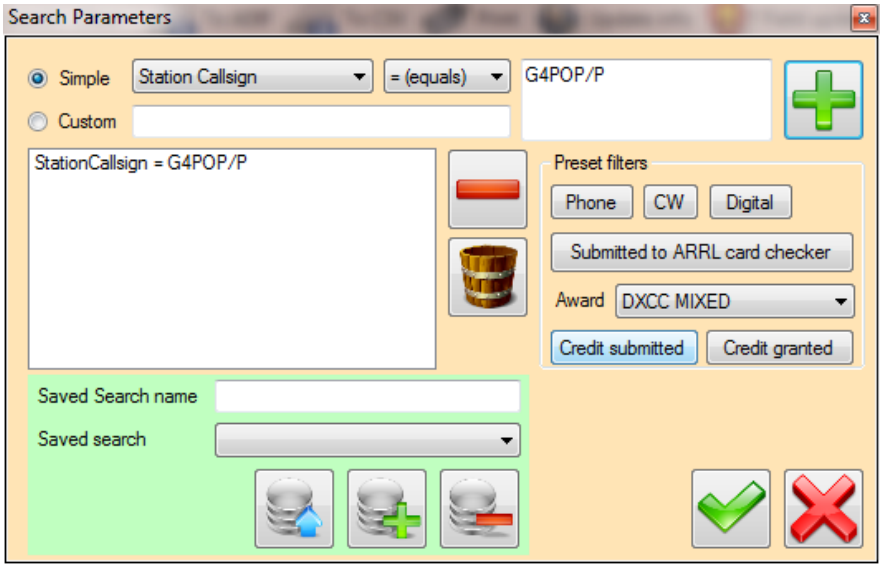


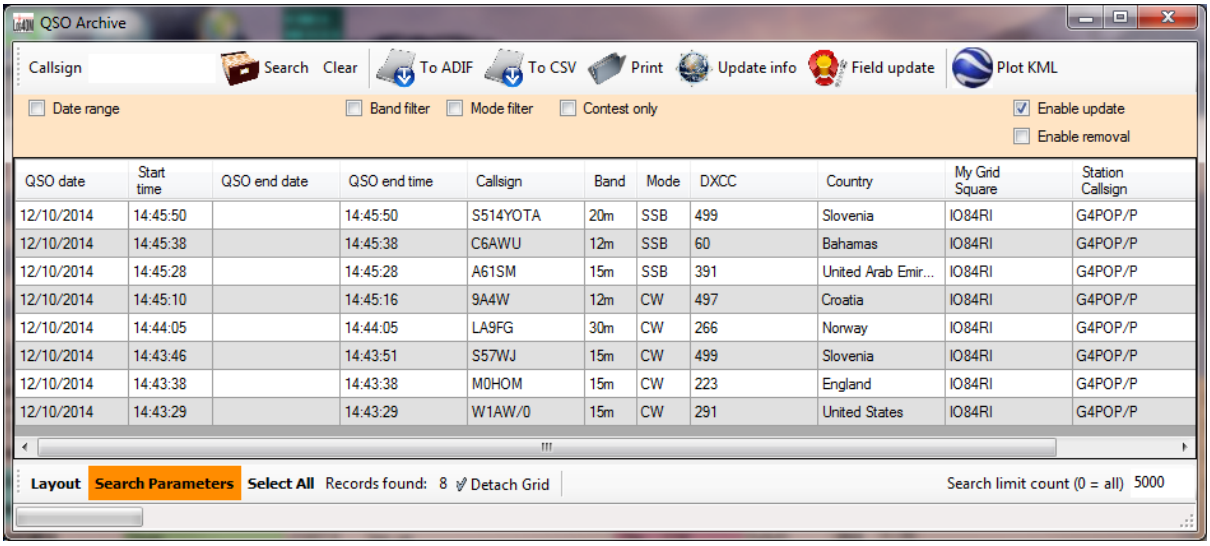
By the Locator (Grid Reference)



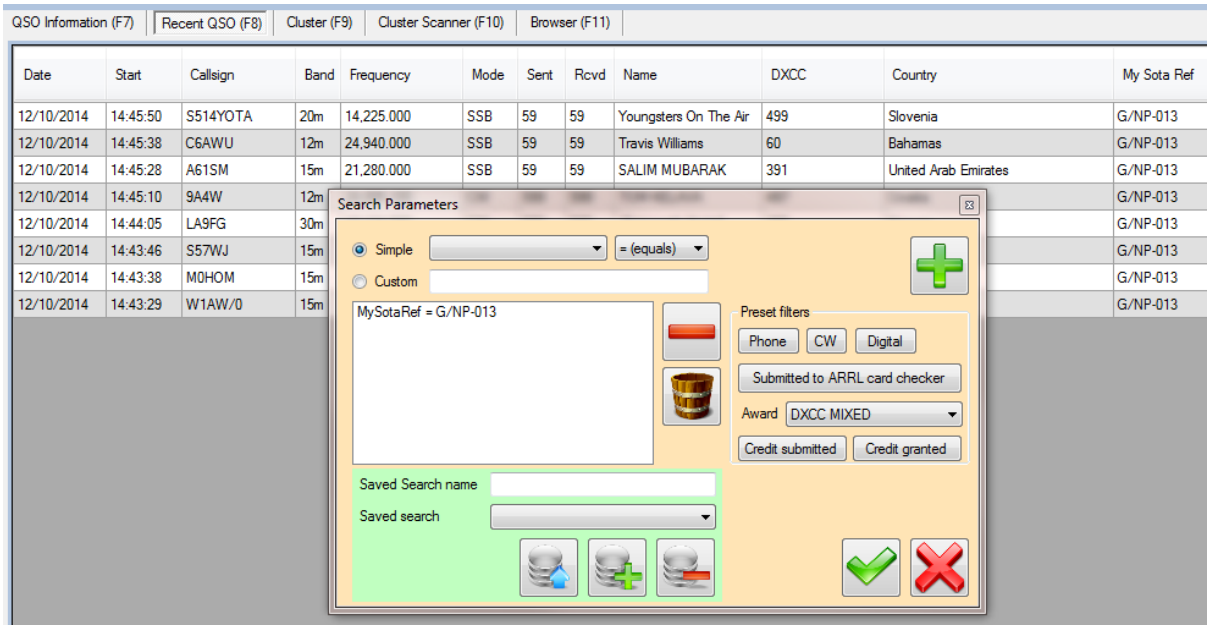


By Station or Operator call sign





Similar sorts can be used in the 'recent QSO' window



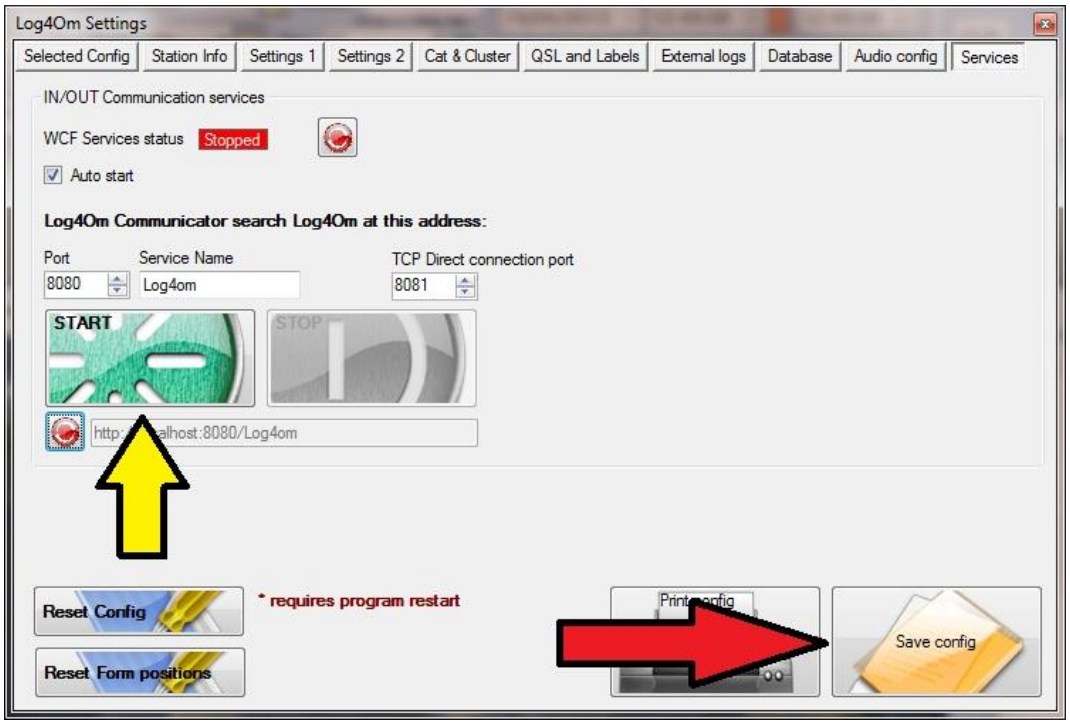
NOTE: After the portable operation the 'Options/Station Info' must be changed back to the normal information

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.

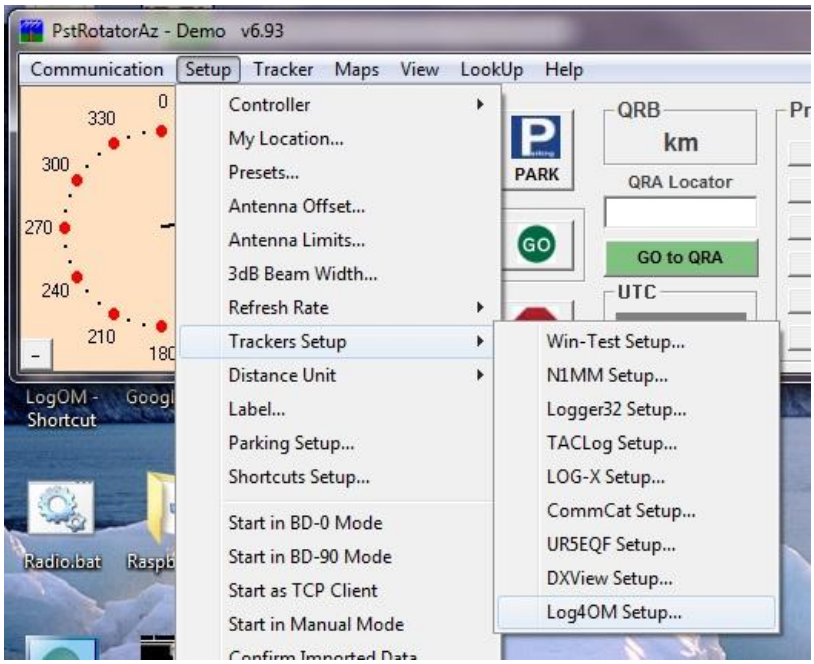


Check the boxes shown, click the green 'Start' button and save the configuration by clicking the 'Save config' button at the lower right of the screen. The Communicator window will now open.

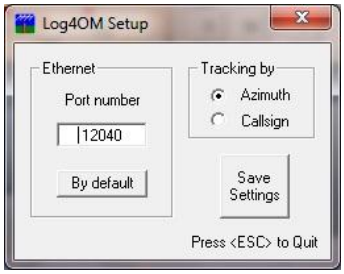
Rotator Control

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.qsl.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

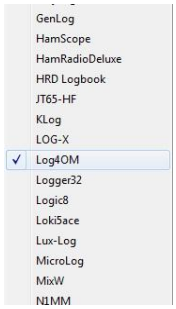


Select the Log4OM setup window from the PSTRotator 'Setup' menu.



Take note of the Port number for insertion in the Log4OM Communicator PSTRotator set up tab.

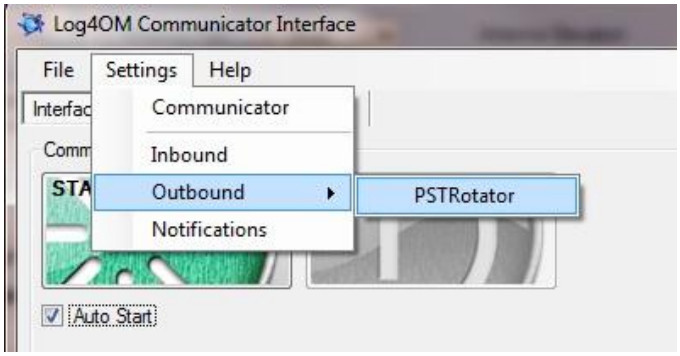
In PstRotator select the 'Tracker' menu and select LOG4OM in the Tracker drop down list



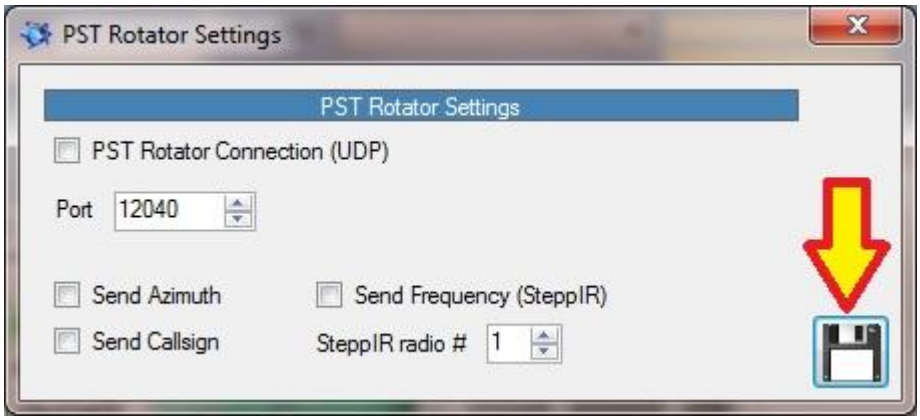
Then set the 'Mode to 'Tracking'.

In the Log4OM Communicator

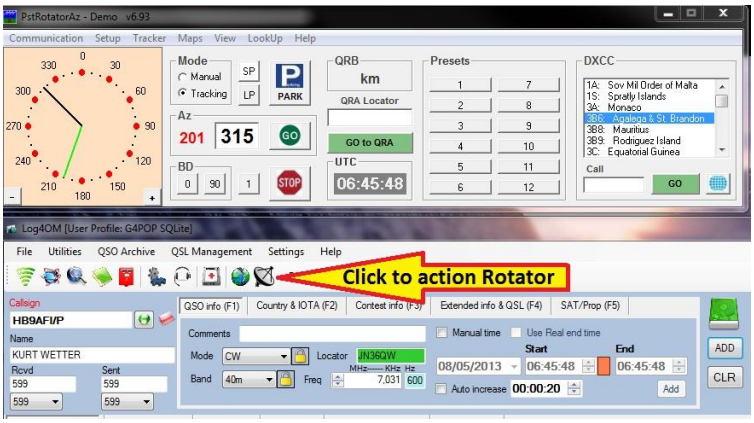
1. Stop the communicator
2. Select “Settings/Outbound/PSTRotator



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!**



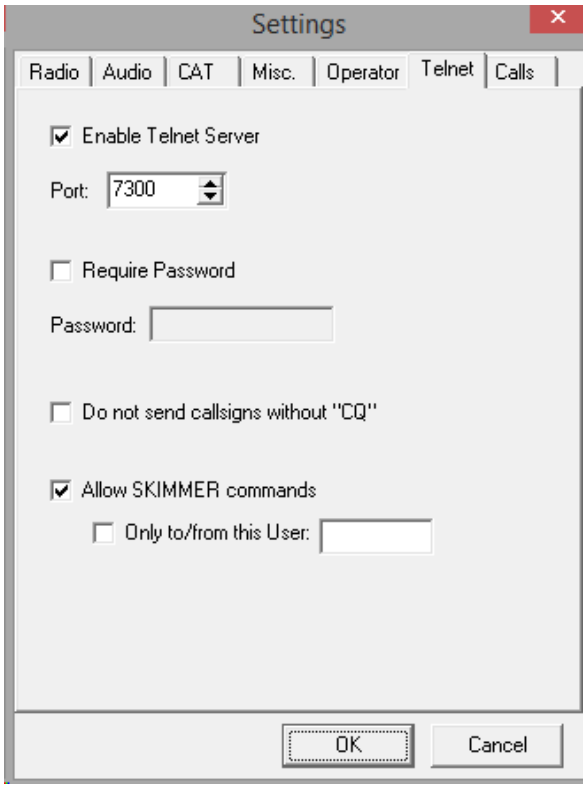
Enter a call sign in the input menu of LOG4OM. Then click the rotator icon to instruct PSTRotator to move the rotator onto the short path heading.



Additional rotator control can be found in the drop down menu, alongside of the rotator icon.

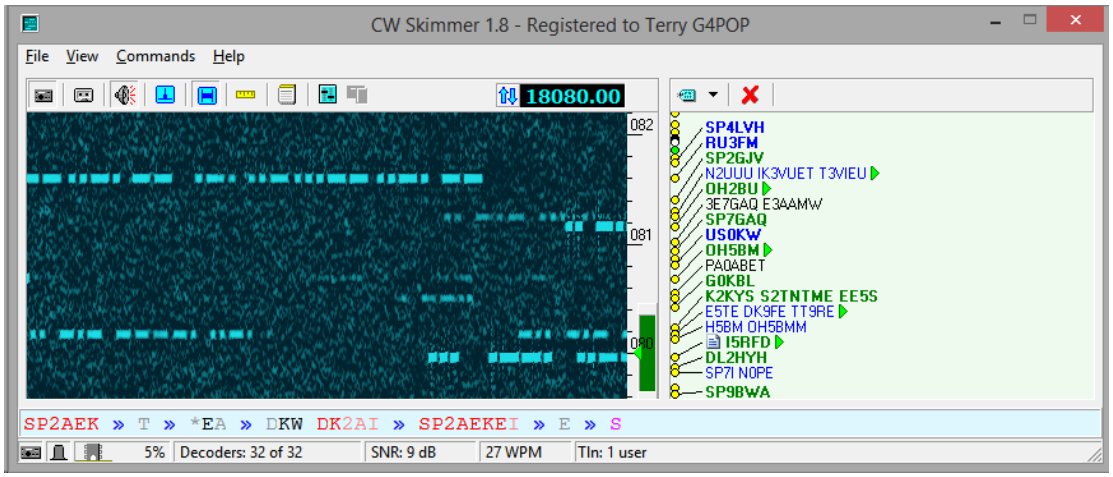
CW Skimmer set up

To integrate the excellent CW Skimmer software by Alex VE3NEA download, install and register the program and complete the CW Skimmer settings paying particular attention to the telnet settings.



Take note of the port number which by default is 7300, this is the port that CW Skimmer sends the date from and to which Log4om listens.

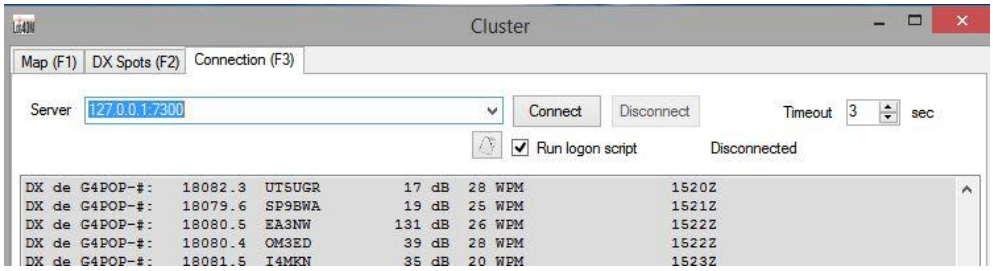
Run the Skimmer radio



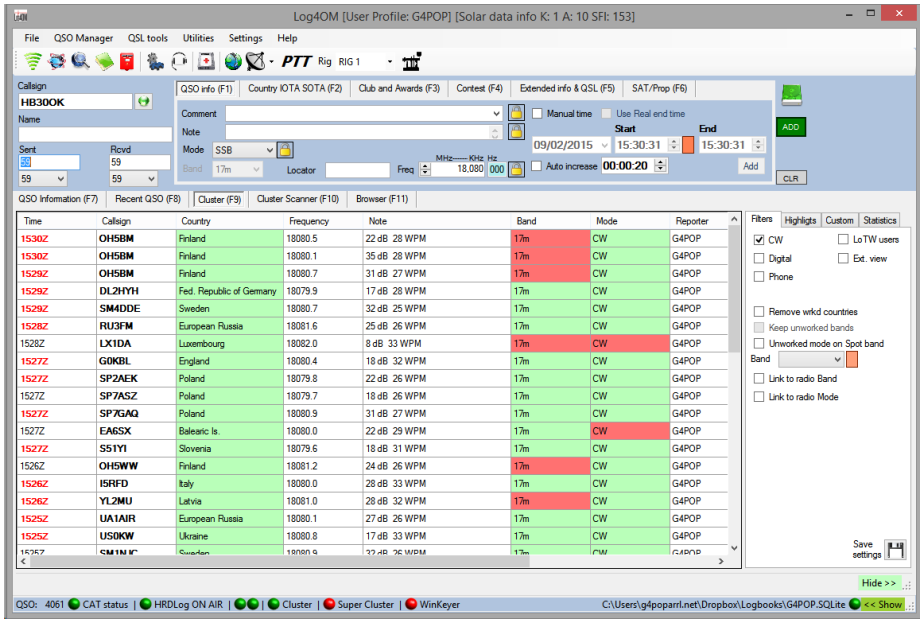
In Log4om go to the Utilities/cluster window and select the connect tab.

Type the local computer address which is normally 127.0.0.1 followed by a “Colon” (:) then the port number for CW Skimmer. E.g. 127.0.0.1:7300

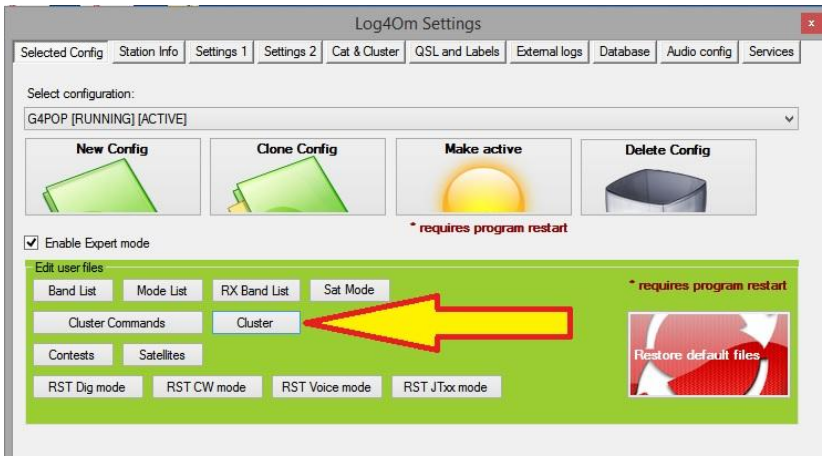
Click the connect button and the login text will be displayed followed by incoming Skimmer spots.



The cluster window may now be closed and incoming skimmer spots will continue to flow in the Log4om Cluster (F9) window.



The CW Skimmer address can be permanently added to the cluster server list by editing the "Cluster" text file in the Log4om Options/Select Config/Enable expert mode/Cluster window

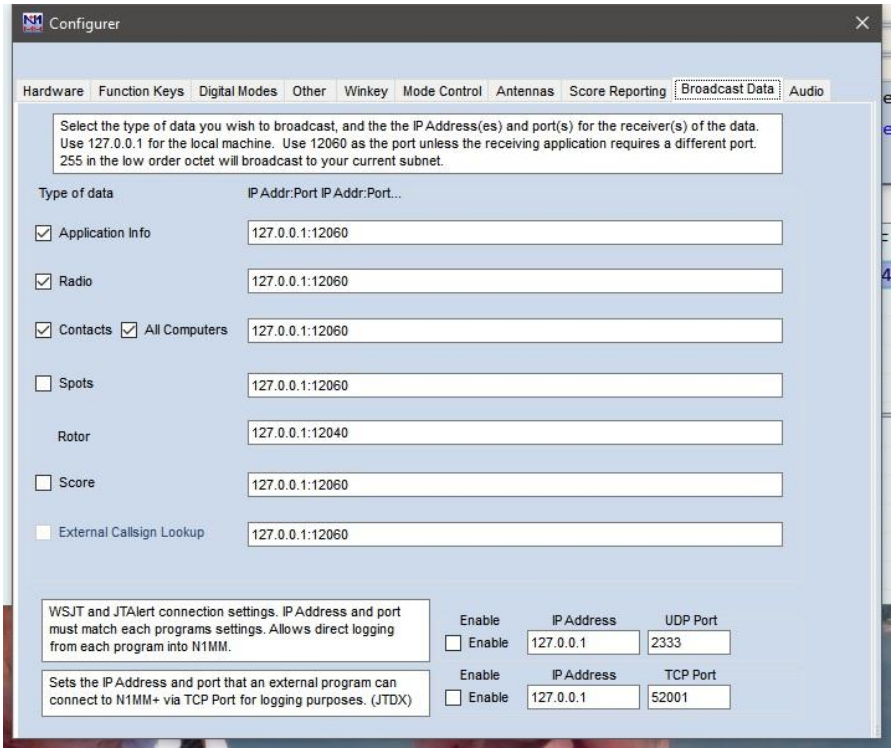


No Skimmer installed! then use a reverse beacon network by entering the url in the server field of Log4om e.g. telnet.reversebeacon.net:7000

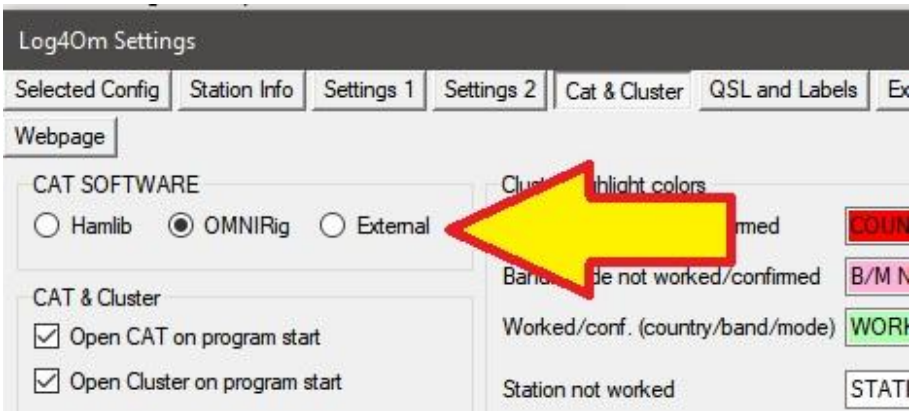
Integration of N1MM or QARtest contest loggers

1. In the N1MM Config/Configure ports, mode control and other select the 'Broadcast Data tab

2. Check the top three check boxes and ensure the ip addresses and port numbers are equal to 127.0.0.1:12060 as below



3. In Log4OM choose 'External' in the Options/Cat & Cluster tab



4. Open the communicator.

5. Stop the communicator by clicking the large red button marked 'Stop'

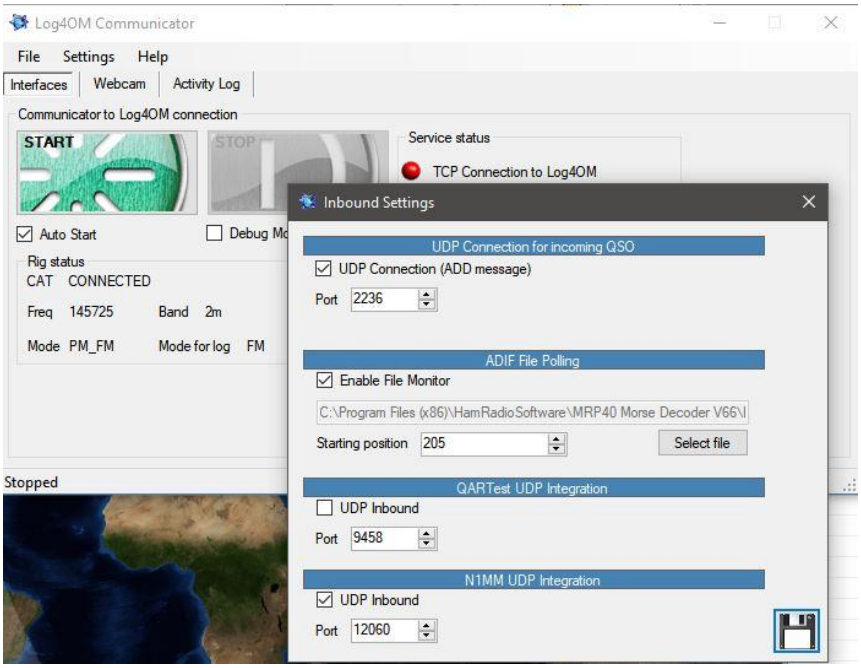
6. Go to the settings/Inbound/inbound settings menu

7. Check the 'NiMM UDP Integration' or QARtest UDP integration' check box marked 'UDP inbound'

8. Ensure the port number displayed is 12060

9. Close the inbound settings window and press the large green button marked 'Start'

10 Minimise (DO NOT CLOSE) the communicator window



10. Restart both programs and commence logging in N1MM or QARtest and you will see the QSO's added to Log4OM as you add the QSO in N1MM or QARtest.

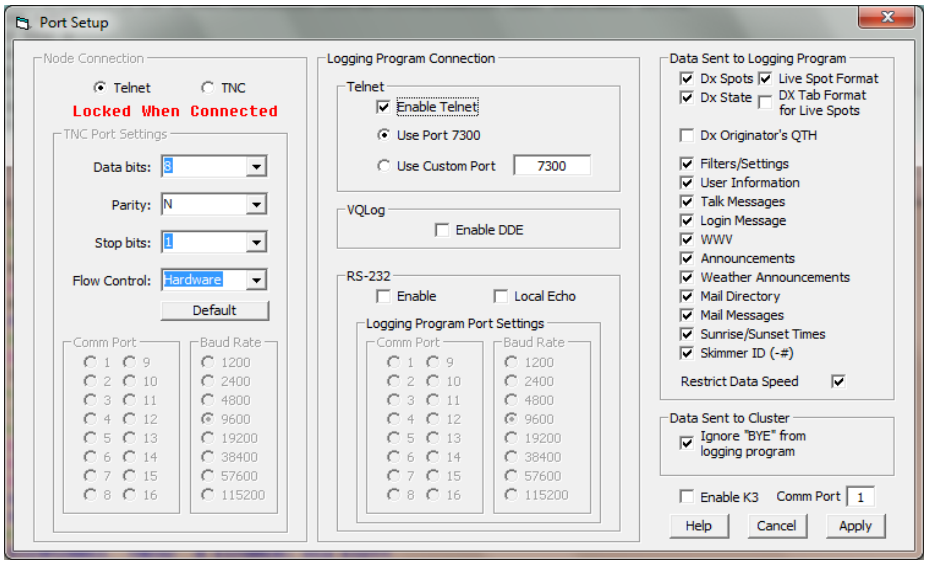
QSO's will be automatically be updated from whichever on line lookup system the user has selected to add the data not normally saved by N1MM.

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.

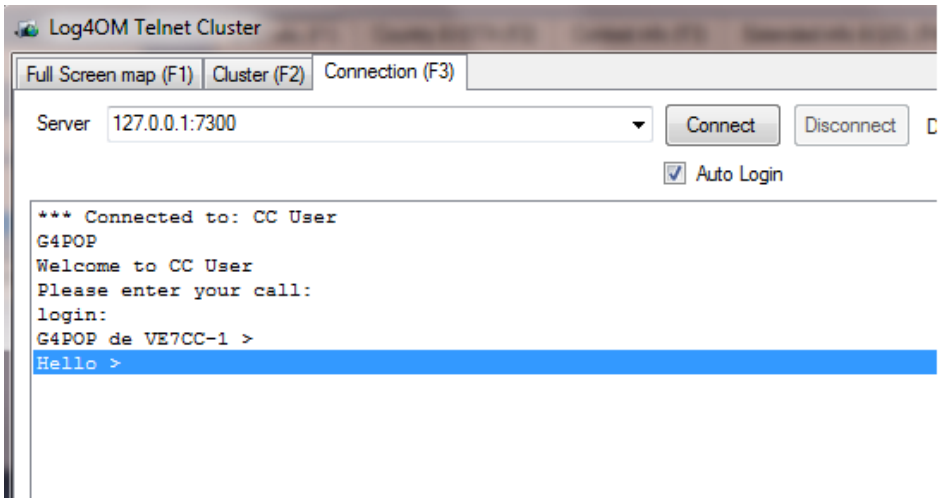
In VE7CC's CC User software go to configuration/ports logging program and check the box ' Enable Telnet' and click Apply.



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.

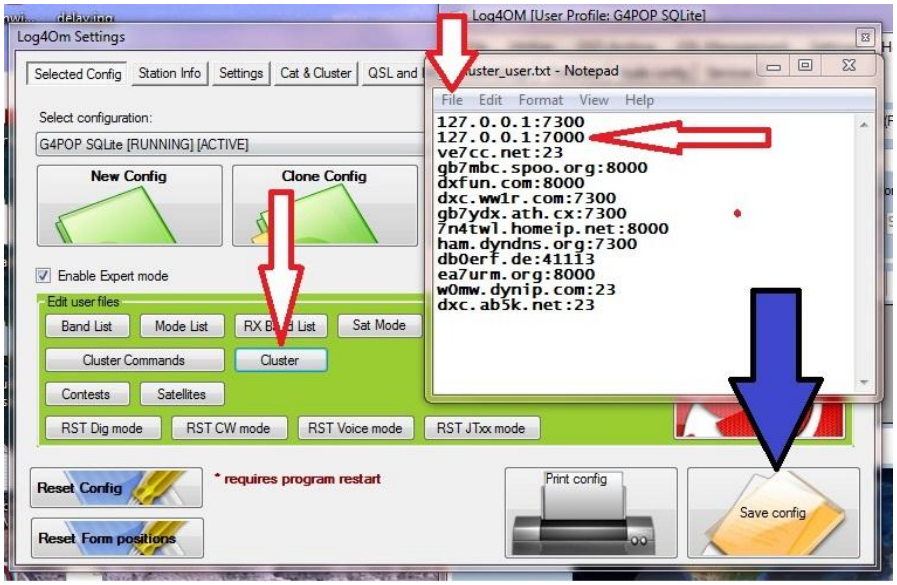
To connect LOG4OM to AR Cluster Client the user has to modify the ArcClient.xml file in the C:\Program Files\AB5K\AR-Cluster Client\Cfg folder by editing the telnet section of the file by setting 'Enabled' to 'True'.

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.yahoofs.com/v1/AAfGUIuNRzhHgpmIsUYGH7p310yLRqIbKssmaG4719vn1zPxN5DpouruwHUuPtvpCKmUi3RlqlJzlWSkRQ45OQ/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'.

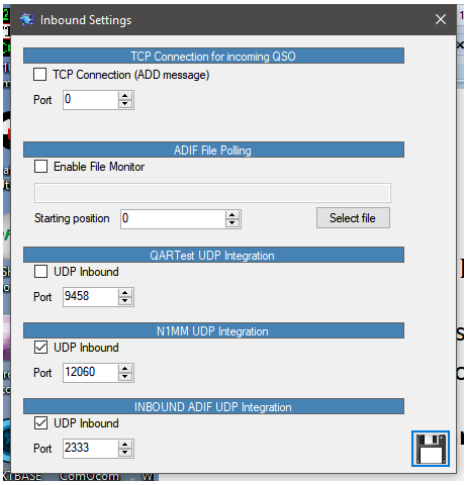
LOG4OM is now receiving the spots directly from the AR Cluster application.

WSJT and Log4OM Integration

The excellent WSJT software from Joe Taylor K1JT can be interfaced directly with Log4OM when using Log4OM version 1.39 and later.

In the Log4OM communicator

- Click the 'Stop' button.
- Select Settings/Inbound/Inbound settings
- Under 'Inbound ADIF UDP' check the box 'UDP Inbound'
- Set the port number to 2333



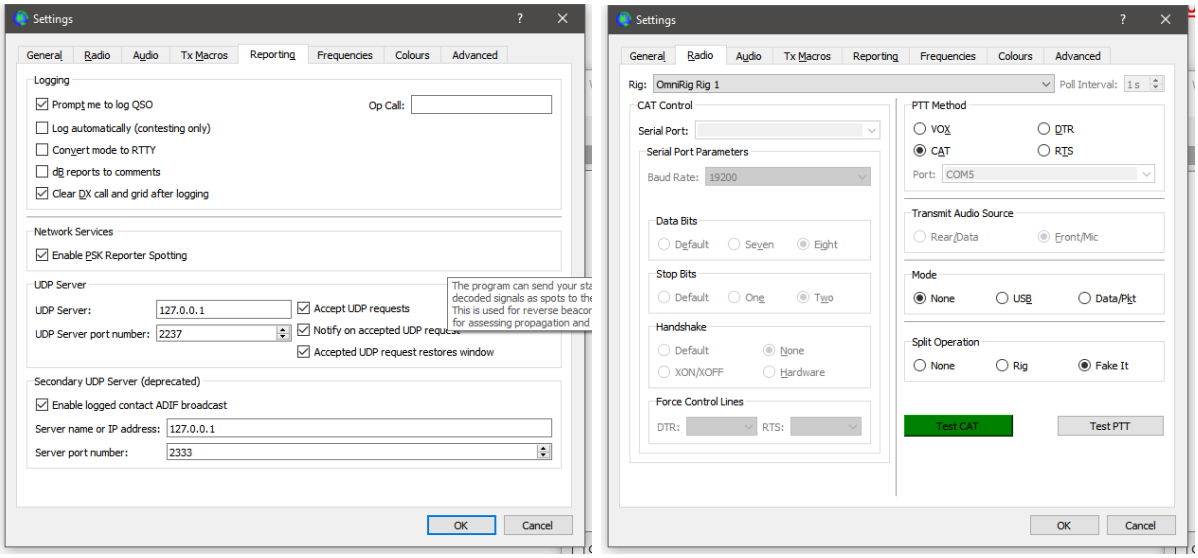
- Click the save icon (Floppy disk)
- Close the inbound settings window
- Restart the communicator by clicking the green 'Start' button

Minimise the communicator - DO NOT CLOSE IT

In the WSJT 'Settings' menu

- Select the 'Reporting' tab
- Ensure the 'Secondary UDP Server' has the 'Enable logged contact ADIF broadcast' box is checked
- Set the port number to 2333
- Select the 'Radio' tab
- In the 'Rig' drop down list select whichever Omnirig radio is to be used
- Select the appropriate PTT method according to the radio interface being used
- Click OK

Restart Log4OM and WSJT



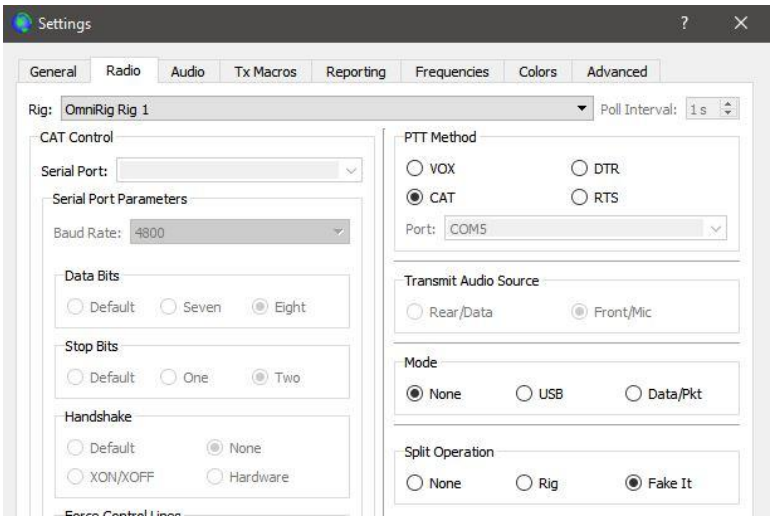
WSJT-X & JT Alert Integration

WSJT-X can also be interfaced to send logged QSO's to the Log4OM logbook automatically by using Omnirig and JT Alert written by Laurie VK3AMA.

Please also study the relative WSJT-X and JT Alert user guides.

WSJT Radio synchronization

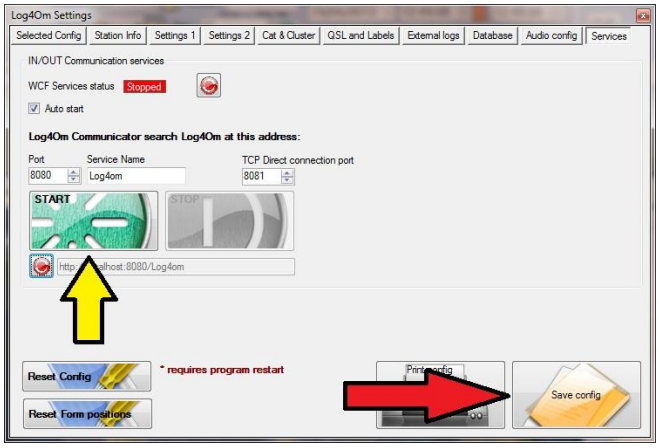
To ensure correct CAT control the user must be using Omnirig for Log4OM CAT control and then select the relevant Omnirig 'Rig' in the WSJT Settings/Radio tab as shown below.



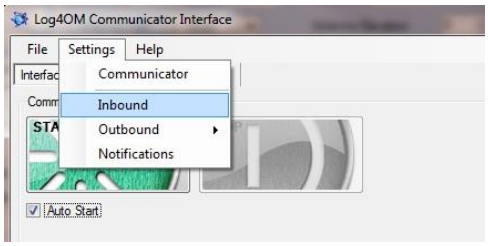
JTAlert QSO logging to Log4OM

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



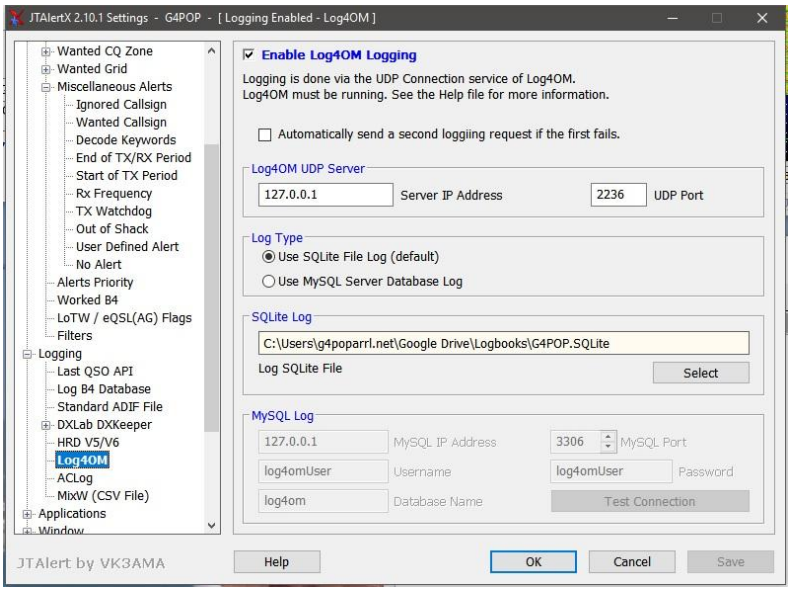
Inbound messages by UDP

- 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/Manage 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’



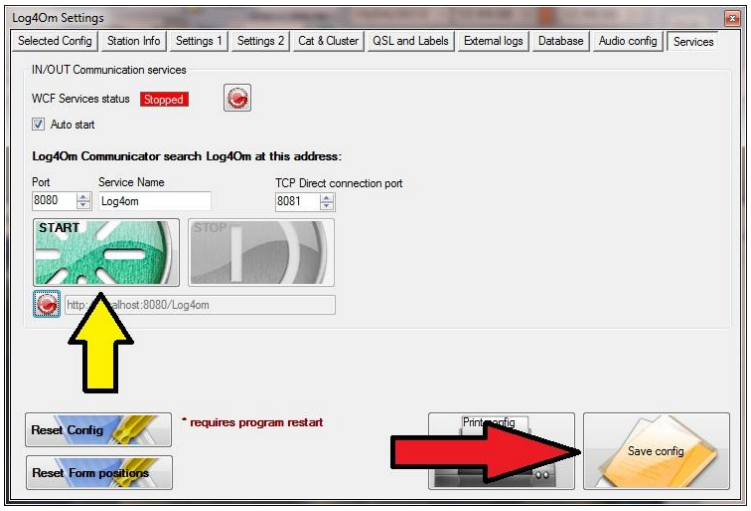
8. Restart all programs (Log4OM, and its Communicator, WSJT-X and JT Alert must all be running for QSO’s to be transferred toLog4OM from JT65-HF)

9. CAT control and PTT are controlled by Log4OM and Omnirig - Ensure CAT control is fully operative before proceeding to step 10

10. In WSJT-X configure Settings/Radio tab to use Omnirig 1 or 2 depending upon the radio it is required to connect to.

FLDigi Integration

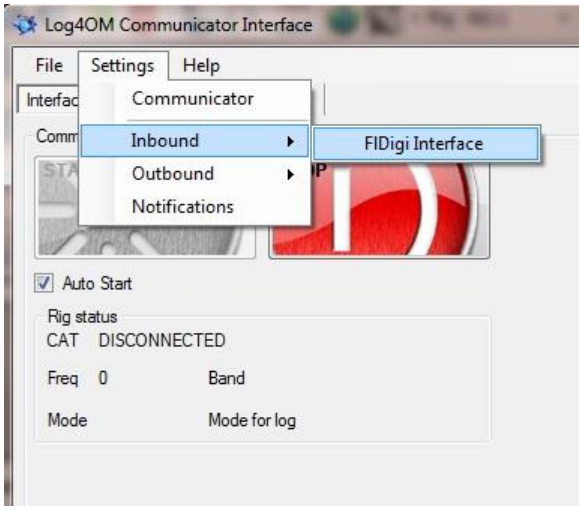
Select ‘Settings’ in LOG4OM and click on the ‘Services’ tab and instruct the program to communicate with other software.



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.

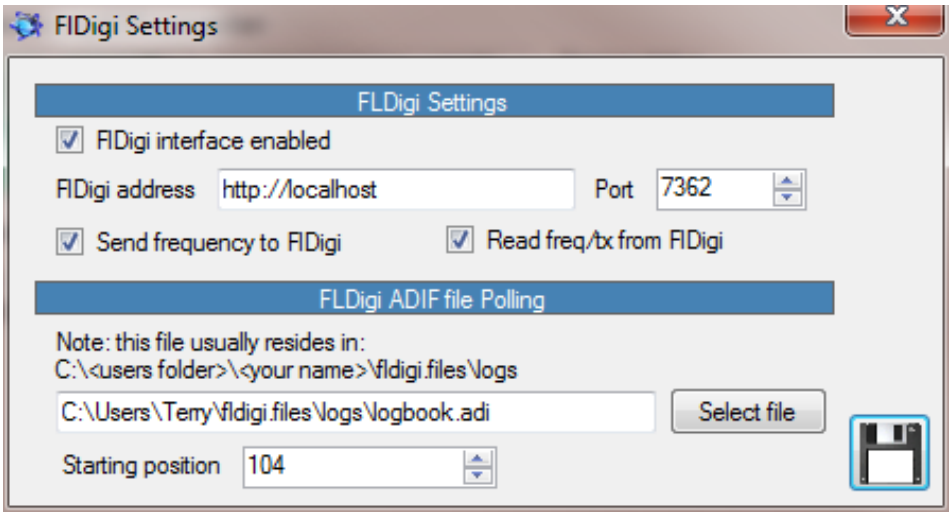
- Stop the communicator
- Select the Communicator "Settings/Inbound/FLDigi interface" menu



- 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



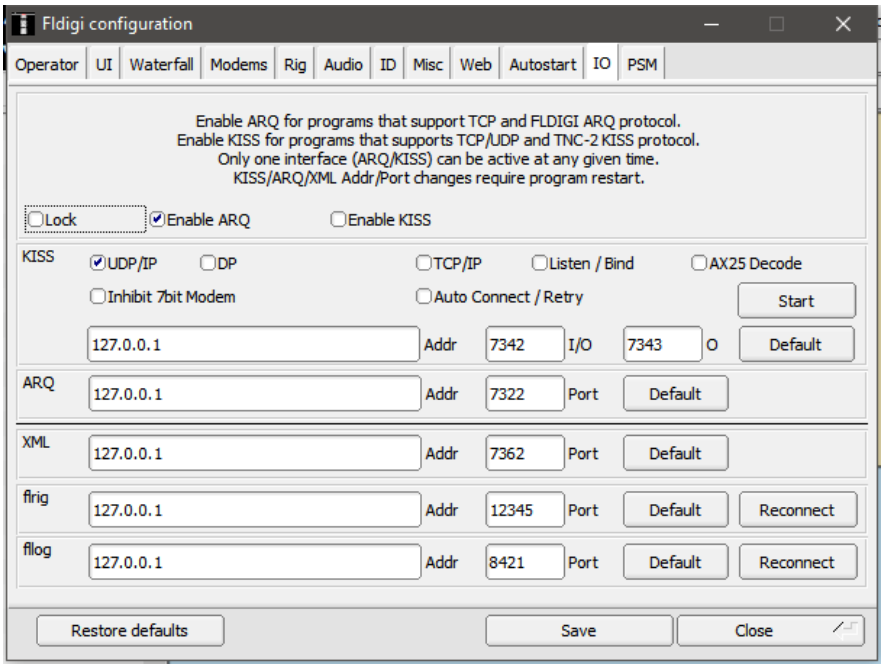
- Click the 'Save button'

- Restart Communicator

- **Minimise** the Communicator window – **Do not close it!**

- In FLDigi in rig configuration **disable** any existing CAT control like Hamlib

- In FLDigi configuration window click on the IO tab and ensure that UDP/IP is checked and that XML is set to 17.0.0.1 port 7362
- Click the lock check box
- Click on 'Save'
- Click on 'Close' to close the window



- 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 an external radio facility into his SDR software which uses Omnirig.

Providing both Omnirig and Log4OM are installed to 'Run as an administrator' as described earlier in this user guide, both Log4OM and SDR-Radio consul can share the radios comport information due to Omnirig's multi-threading capability

Thus frequency and mode will synchronize between Log4OM and SDR-Radio Consul and changing the frequency and mode in either program will result in the radio following that change.

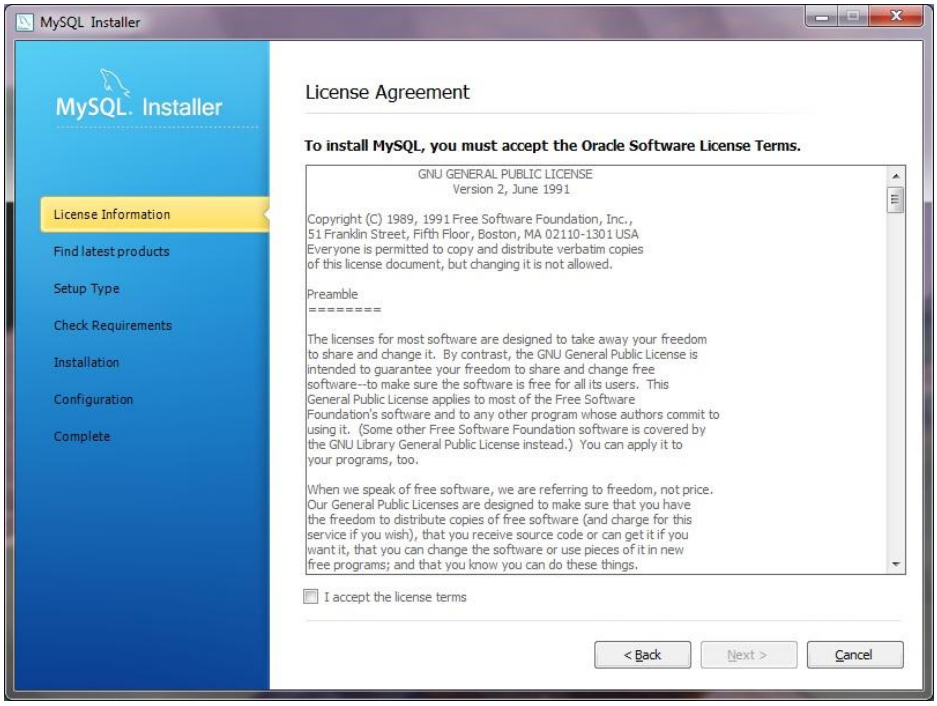
Installing a MySQL Database

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.

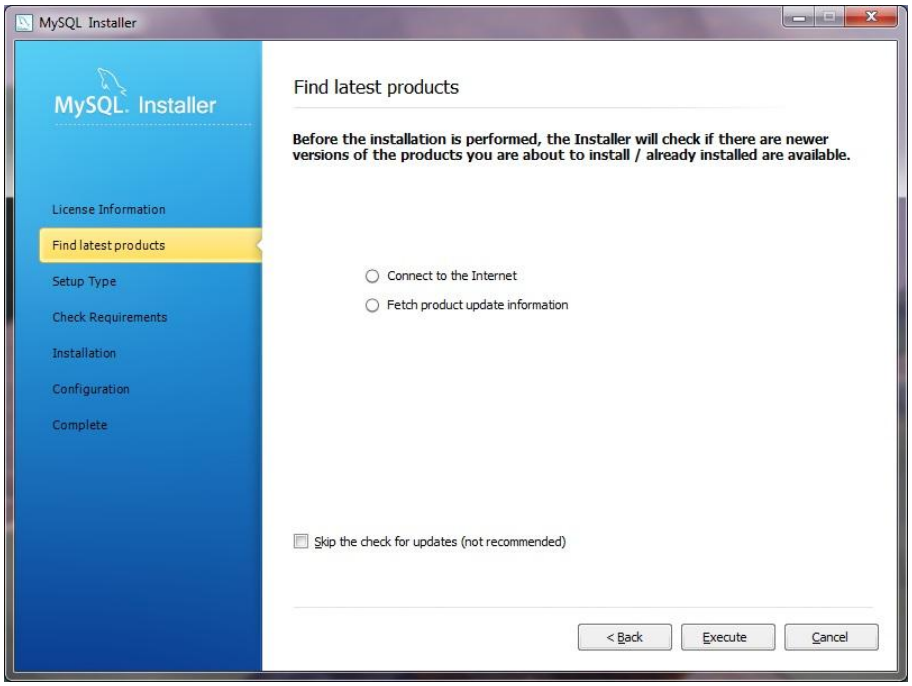
Download from this link http://dev.mysql.com/tech-resources/articles/mysql-installer-for-windows.html

The following screen shots require no explanation and offer step-by-step instructions for both the download and installation procedures.

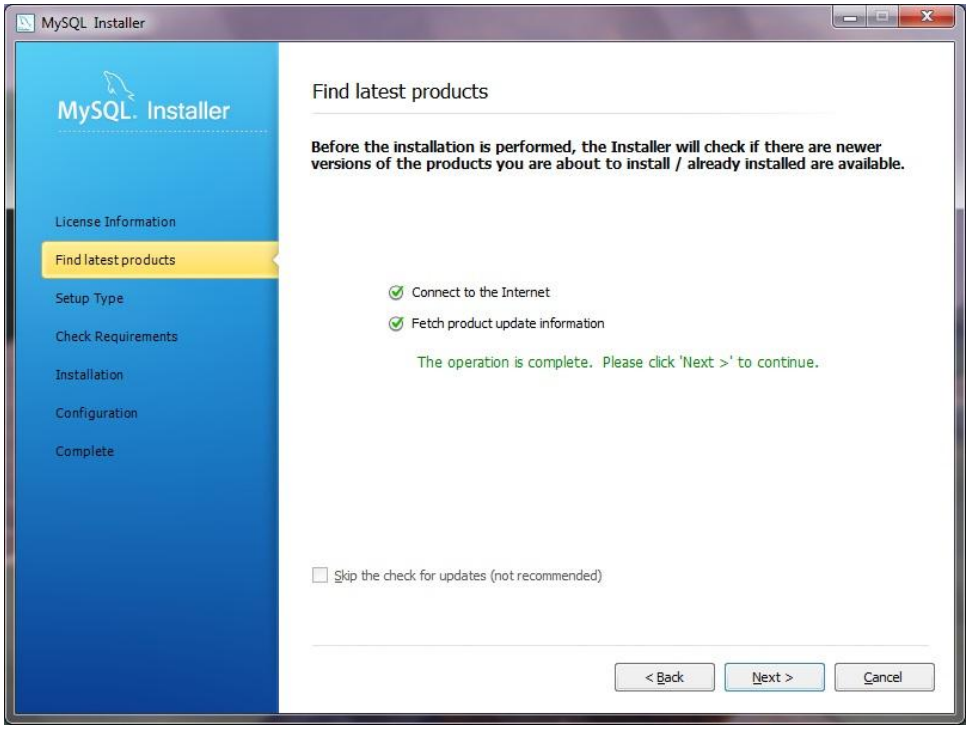
Select 'Install MySQL Products'



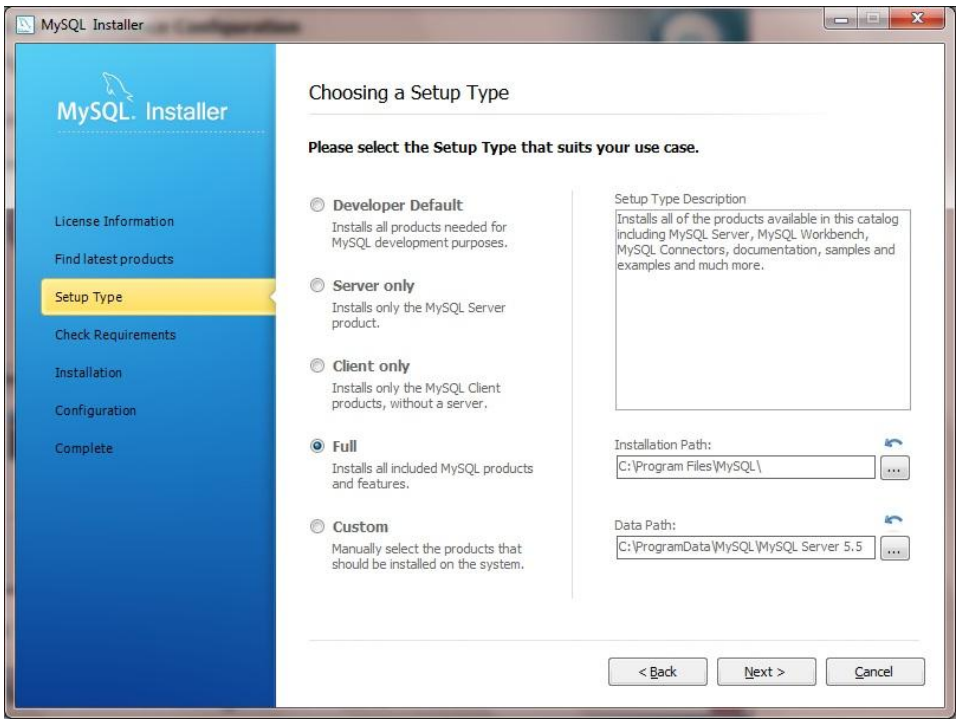
Accept the licence terms



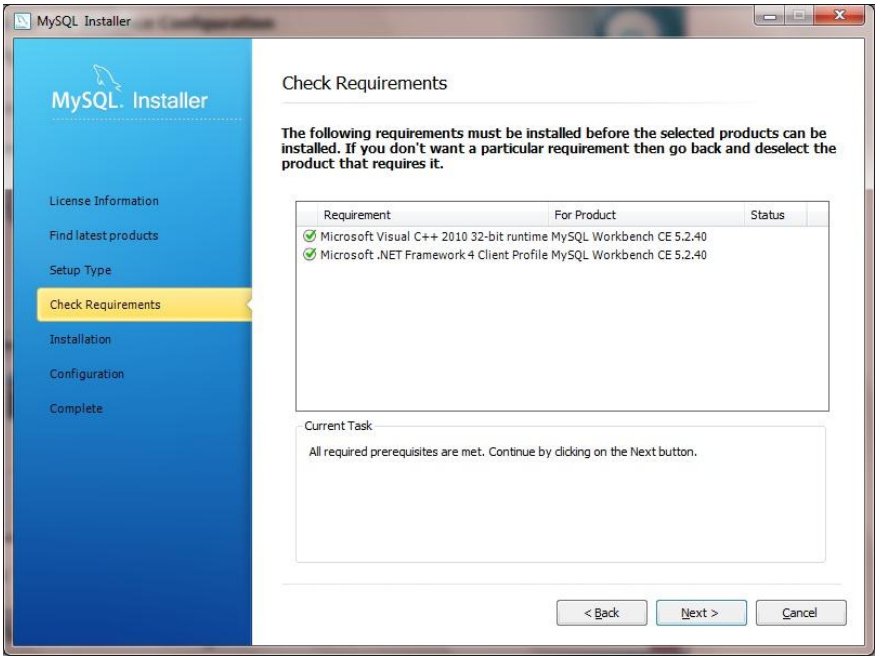
Update from the Internet



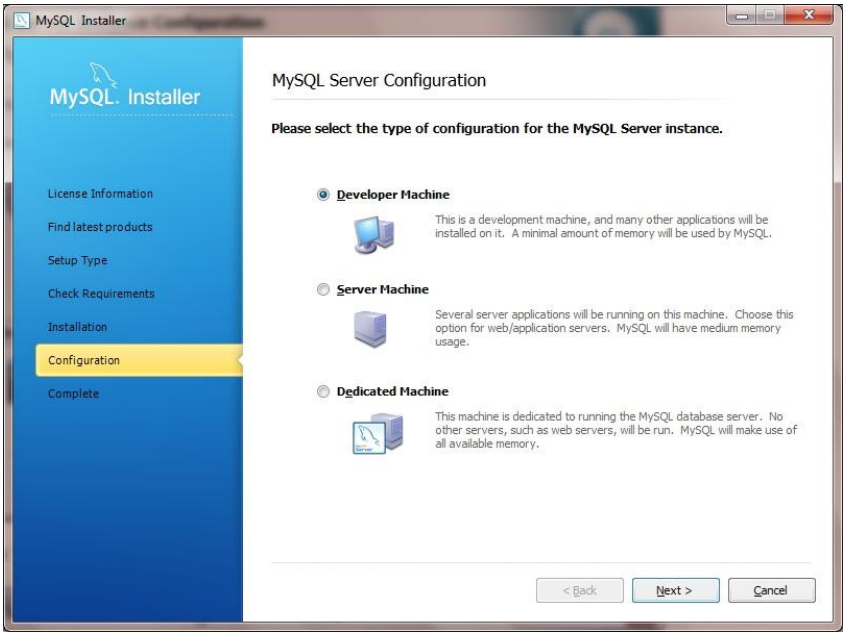
Updated



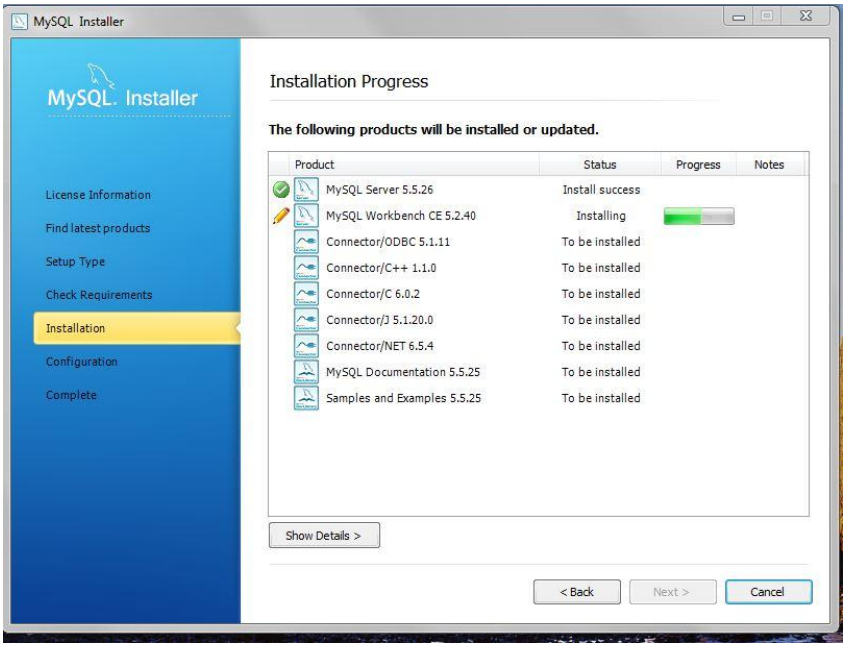
Choose ‘Full’ install



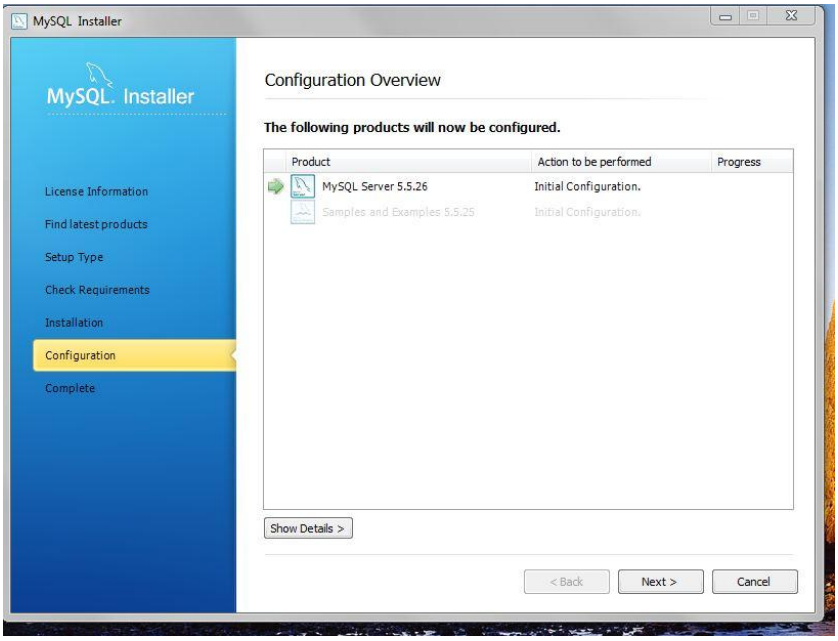
Click 'Next'



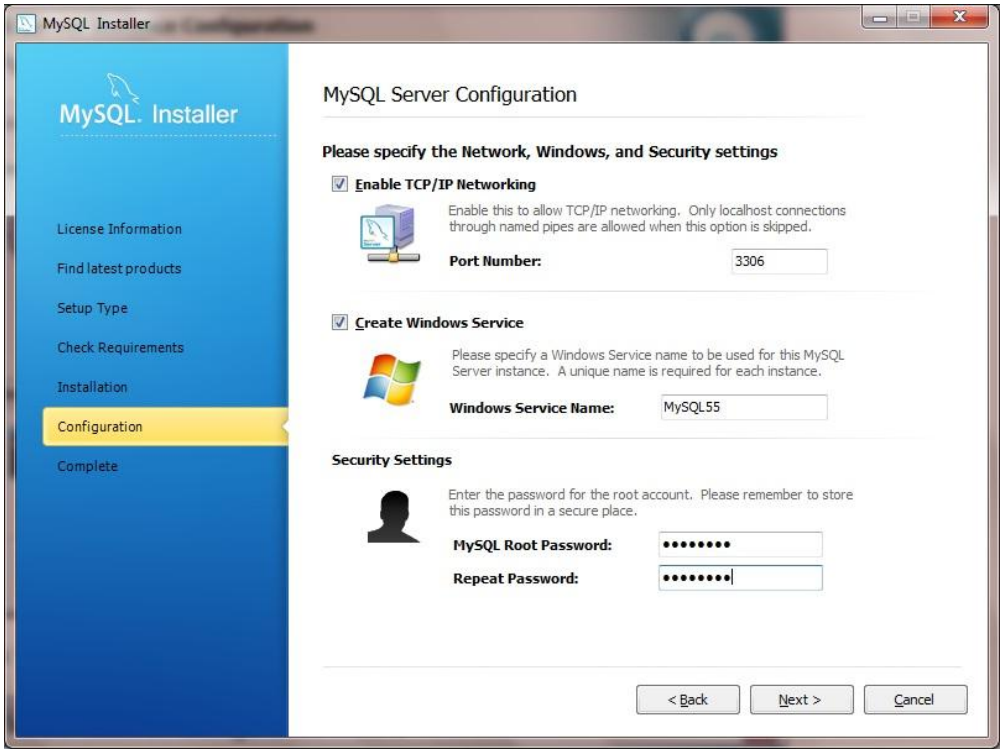
Select the 'Developer Machine' option, which should be adequate.



Click 'Next'



Click 'Next'



Provide a password and make a note of all the settings.

Click 'Next' and the installation is complete.

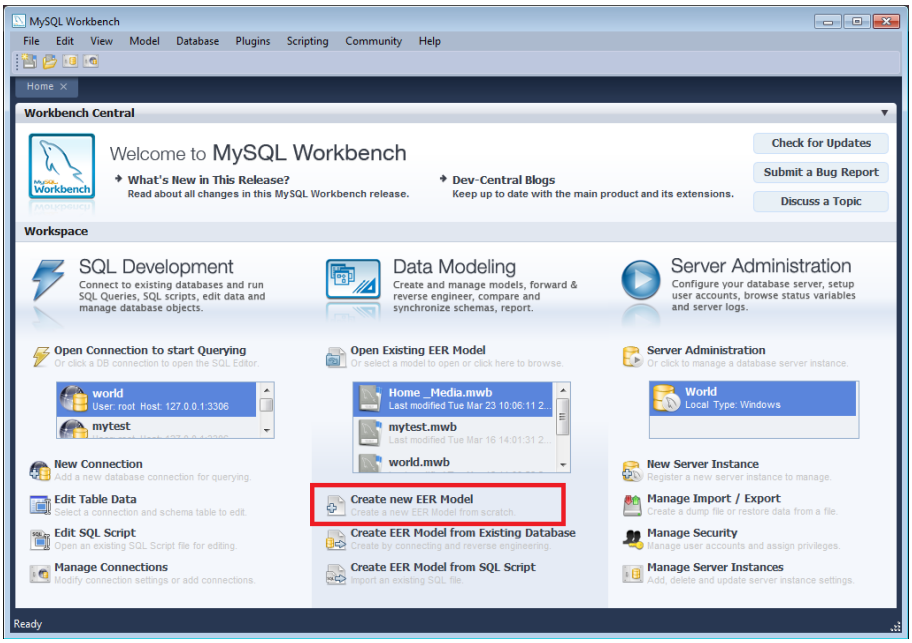
Open the MySQL Workbench and follow the set up instructions given below.

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.

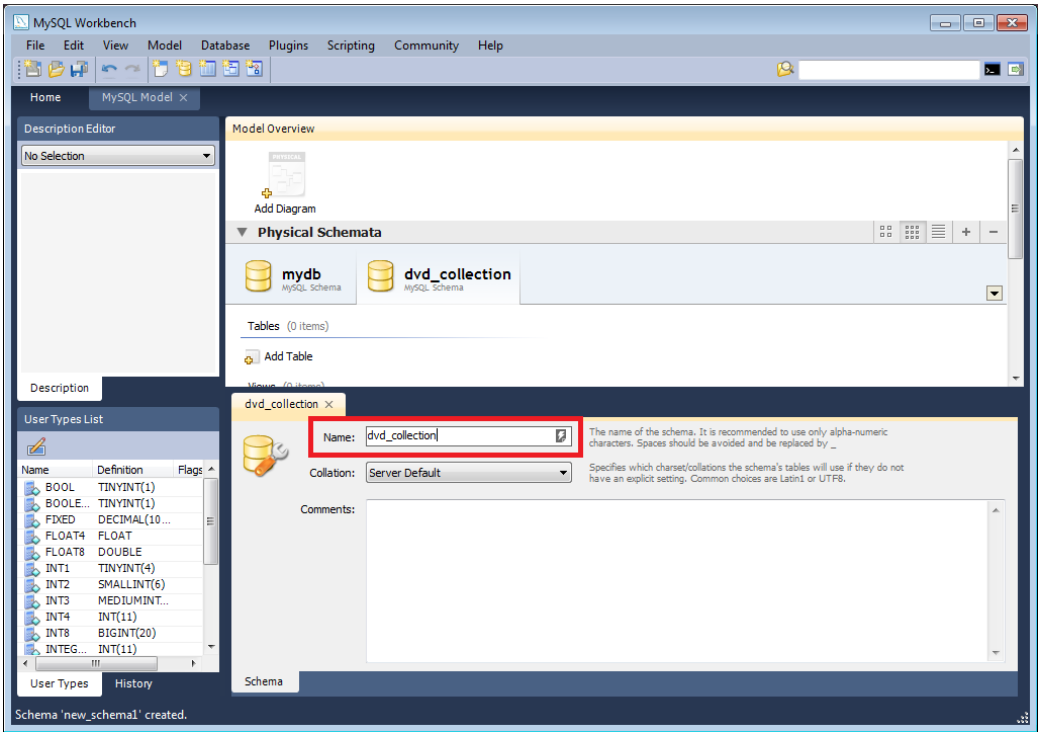
1. Start 'MySQL Workbench'. On the Home window, select '**Create new EER Model'**. A model can contain multiple schemata. Note that when a new model is created, it contains the **mydb** schema by default. The name of this schema can be changed or deleted to suit individual requirements.

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.

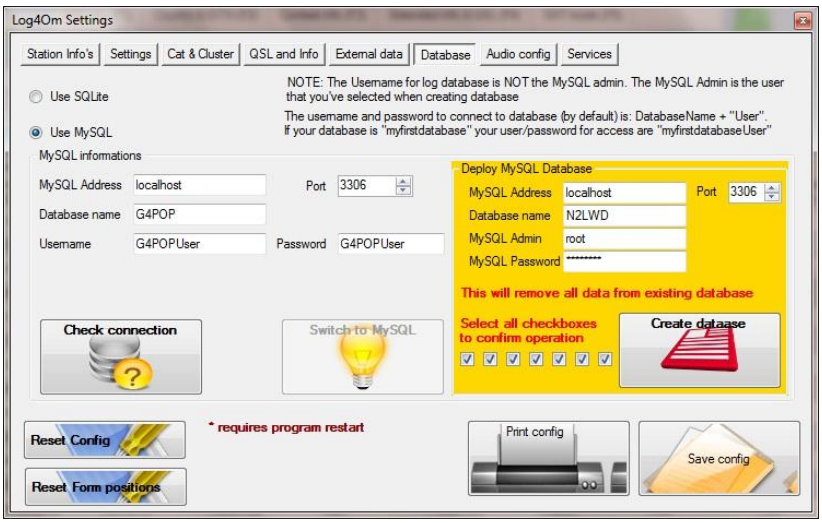
New Schema



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.

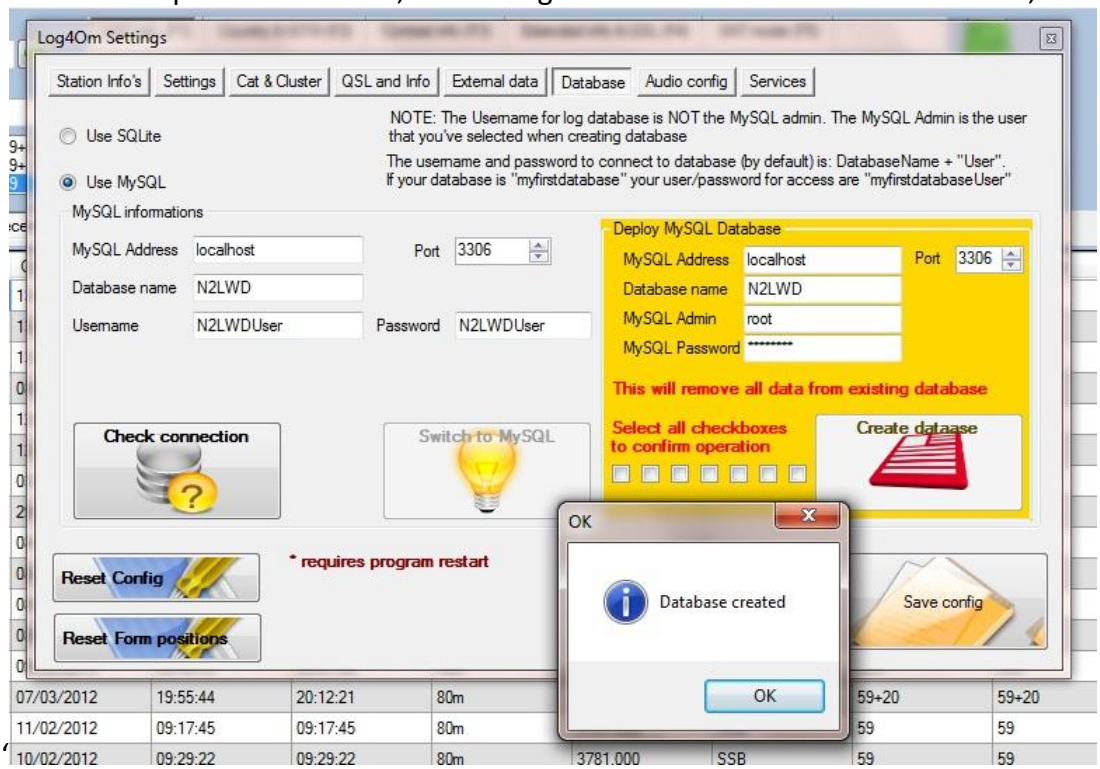


Ignore the fields to the left because they will be completed automatically after setting up the database.

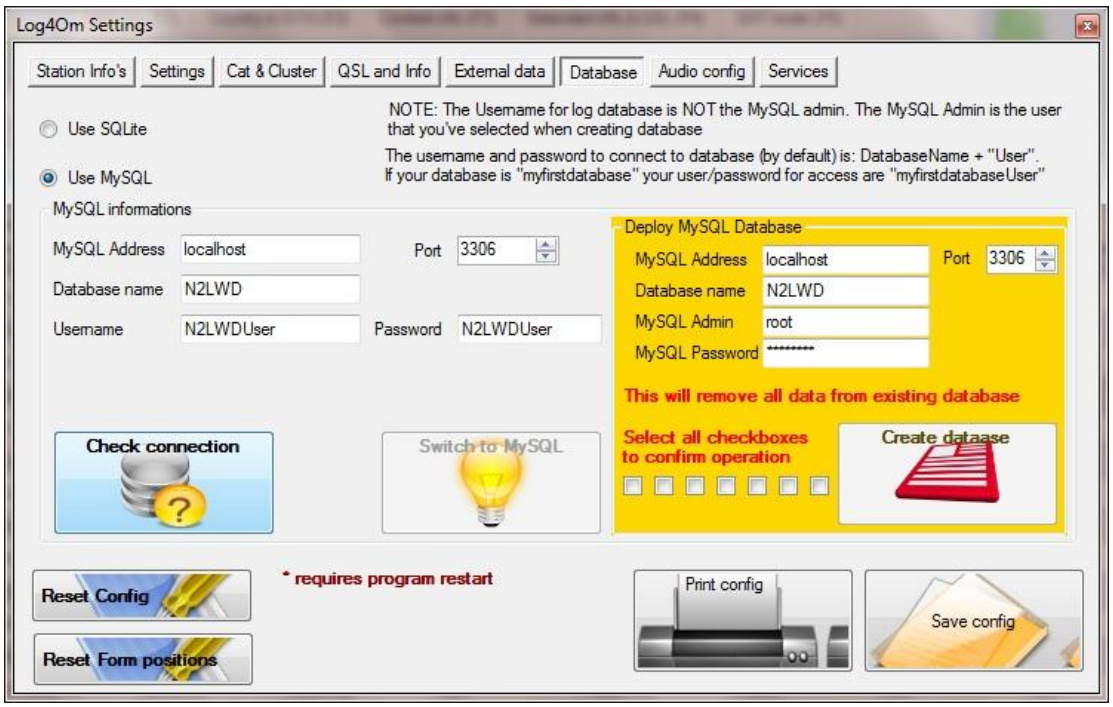
In the Gold/Yellow box to the right enter:

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’.

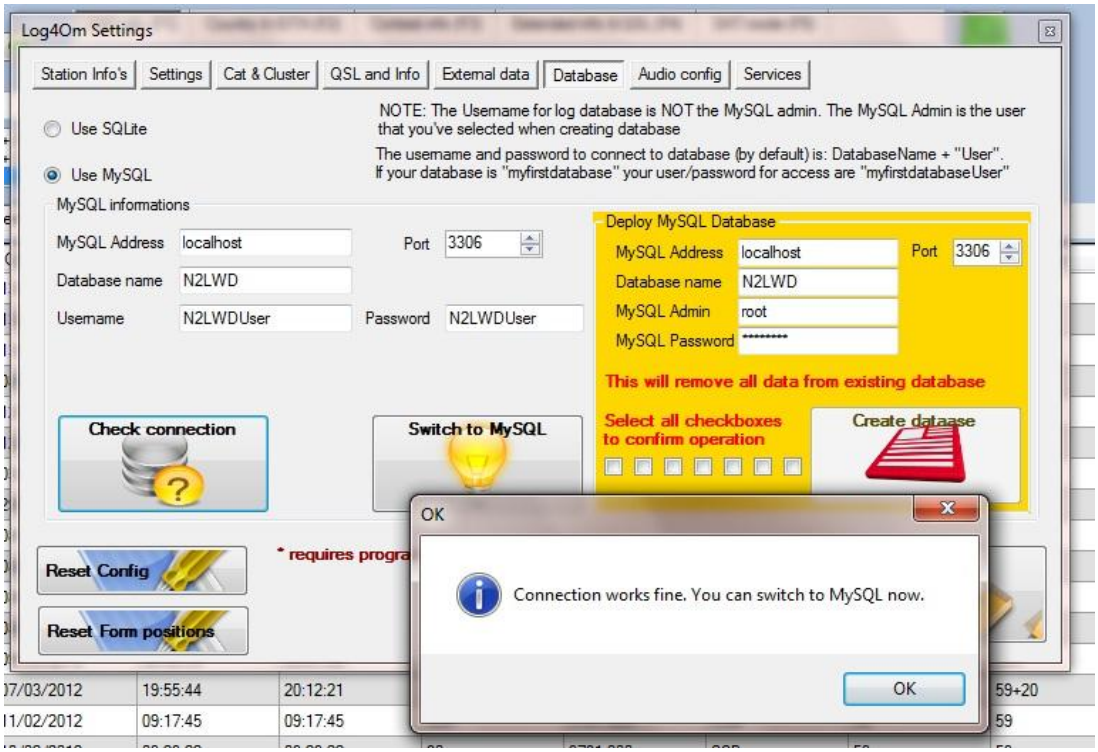
After a short pause this screen, confirming that the data base has been created, will appear.



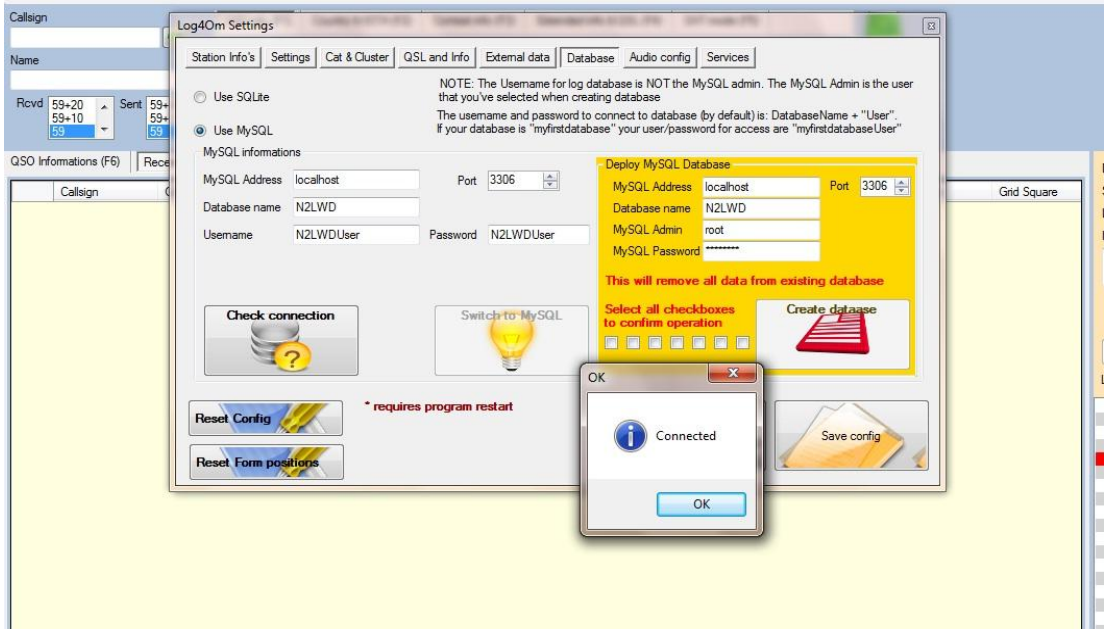
Click ‘OK’



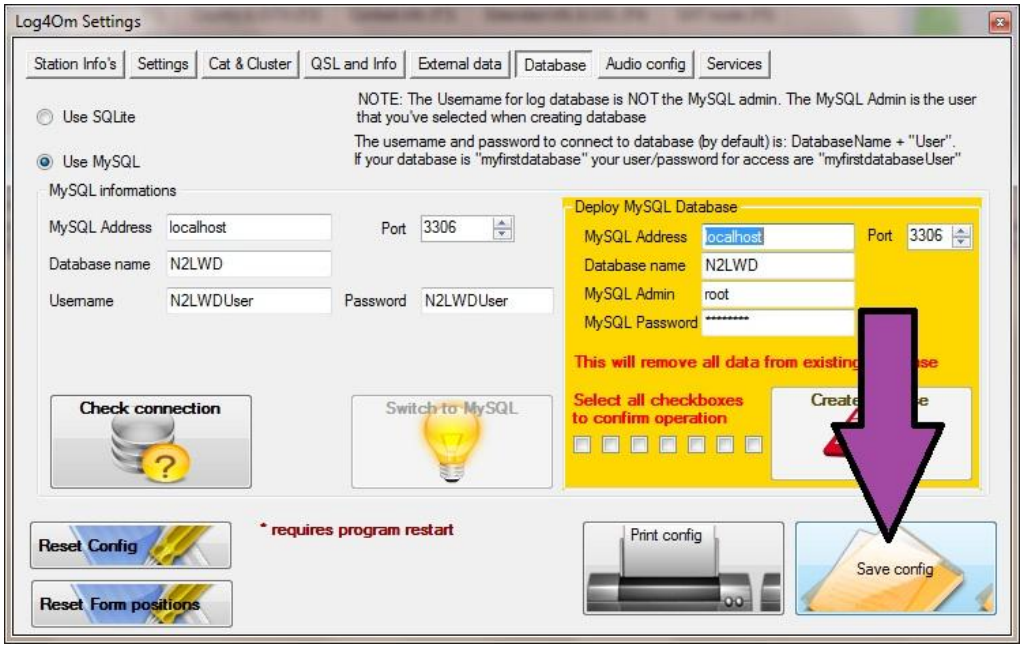
Click the ‘Check connection’ button.



Click ‘OK’ and then the ‘Switch to MySQL’ button for confirmation that the connection has been successful (see below).



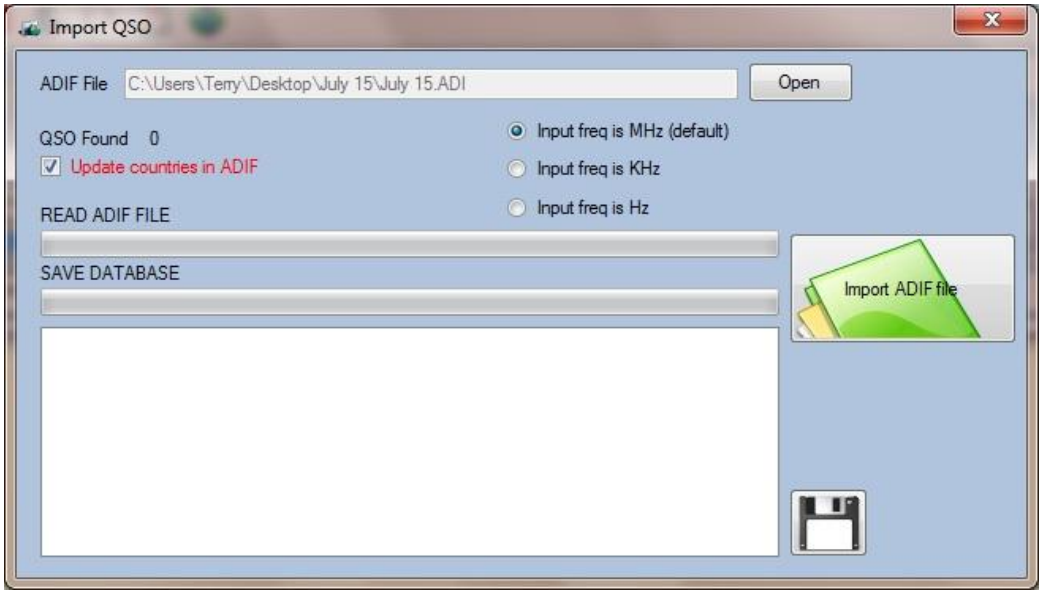
Click ‘OK’ and be sure to click the ‘Save config’ button.



Importing an ADIF file into the new MySQL database

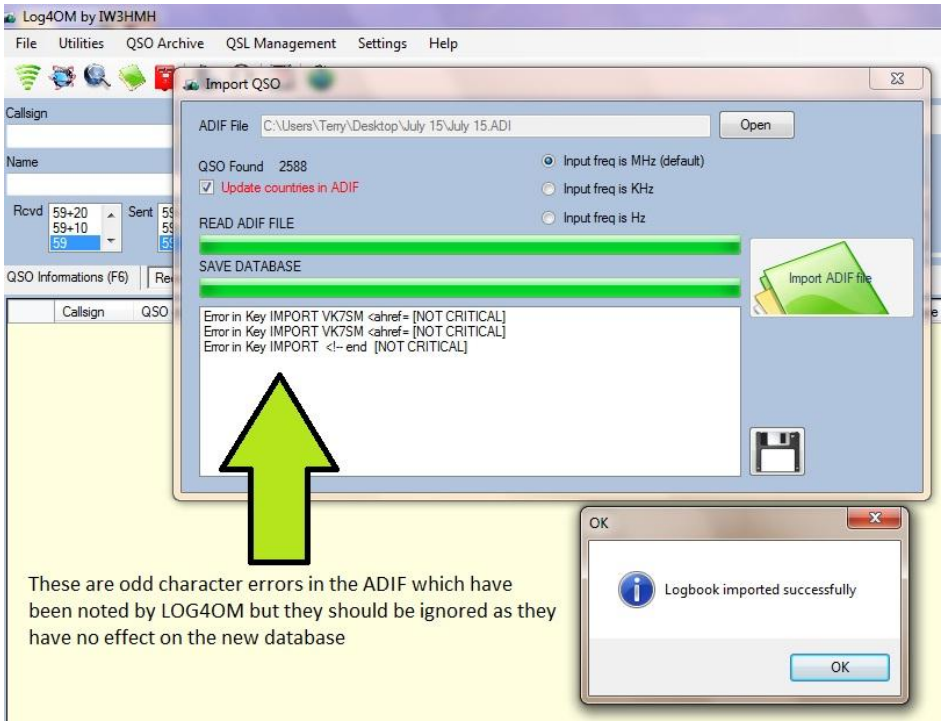
IMPORTANT. Before importing an ADIF ensure that the latest countries file has been downloaded from the 'Settings' menu.

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.

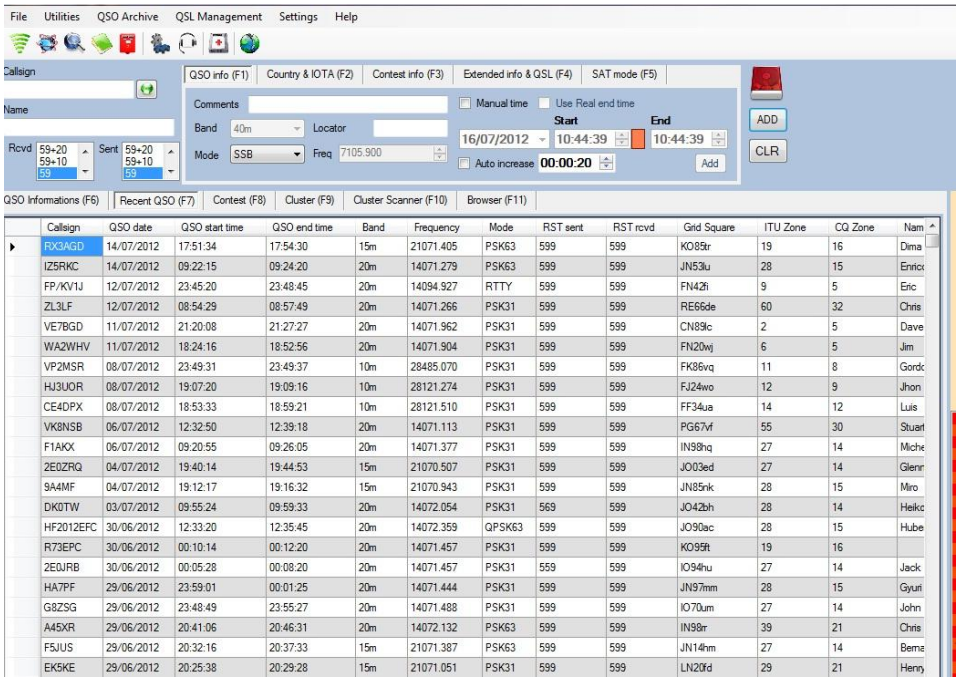


If ‘Error in Key’ messages (as shown above) appear, but they are flagged as [NOT CRITICAL] they can be ignored. They indicate that LOG4OM has found and corrected some character errors in the ADIF.

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

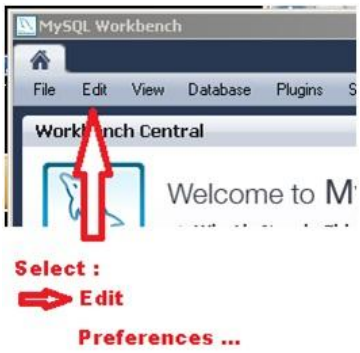
The MySQL database has a utility to export (Backup) and import (Restore) tables in the database called 'Manage import/export' included in the MySQL workbench program, unfortunately there is an issue with this function.

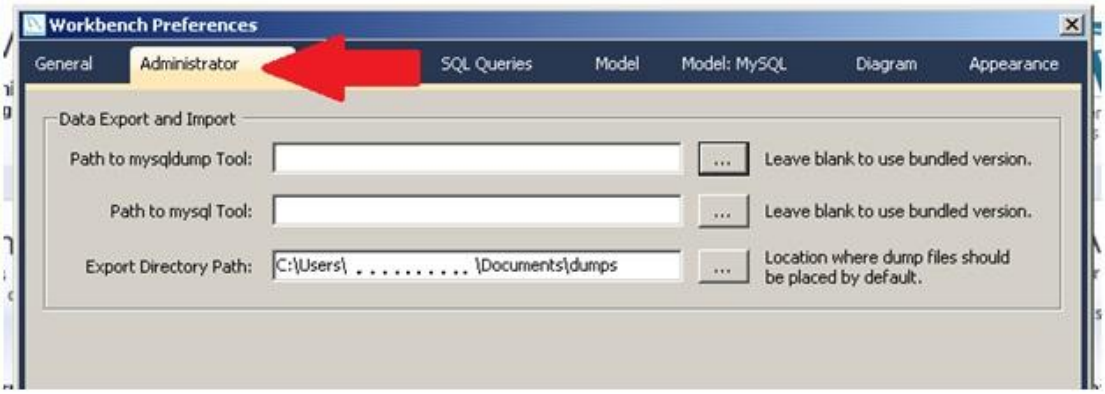
The function can also be used for other procedures including moving tables from one database to another.

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'

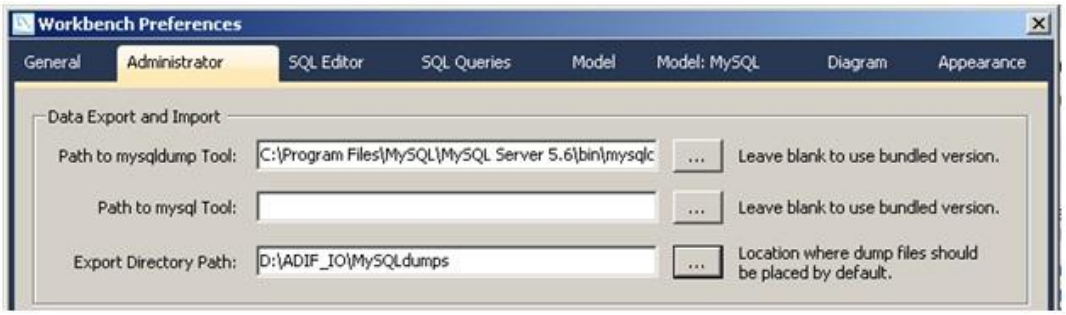




The field 'Path to mysqldump Tool' will be empty which indicates the wrong version of the program has been used.

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.



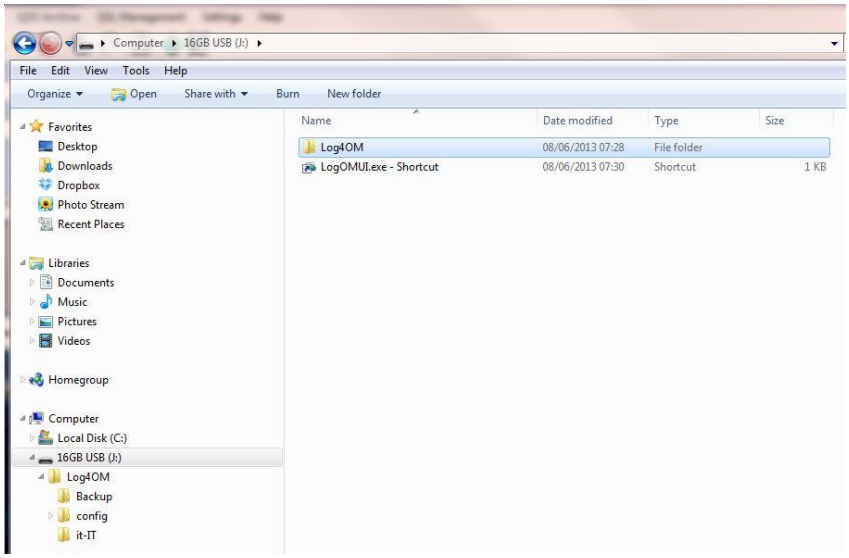
A full description of this function is outside the scope of this user guide, however a full explanation can be found in the MySQL manual and also on the Internet.

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 or 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

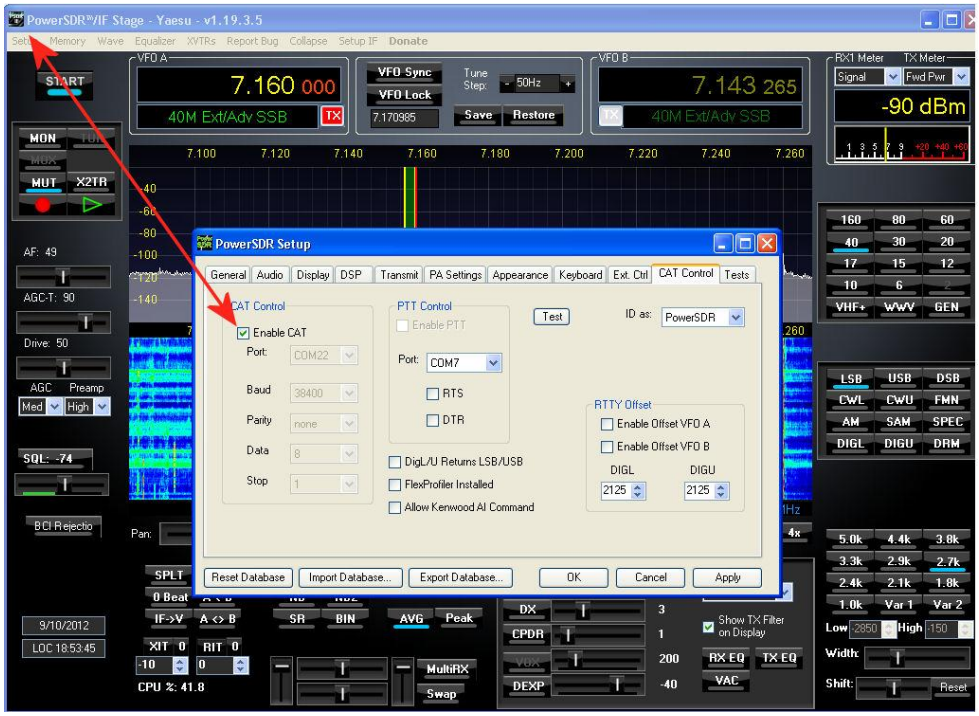
The user must change the drive letter accordingly for the program to function correctly every time the memory stick is used with a different computer.

Flex Radio setup

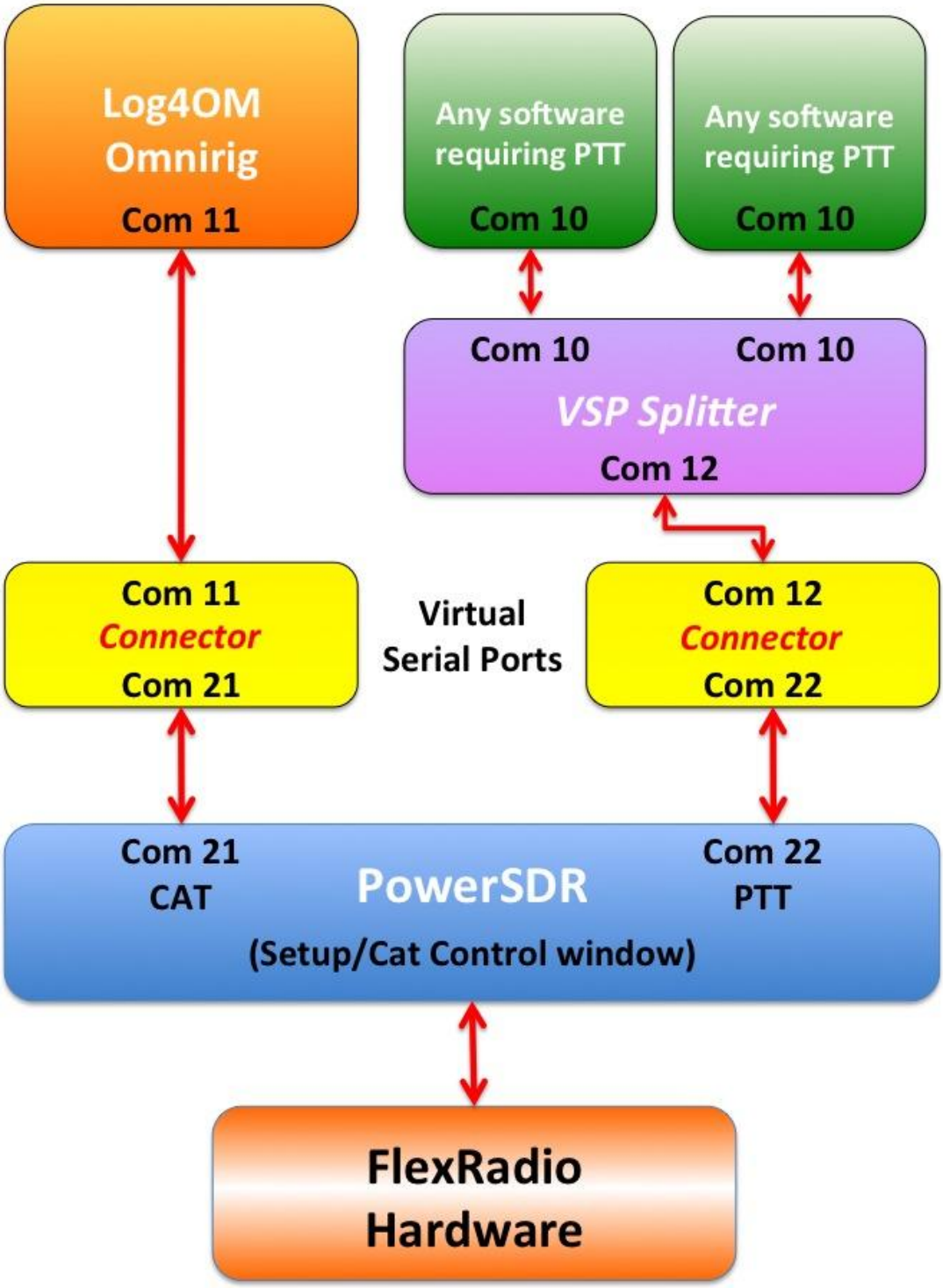
Written by Jim Steinmetz W1RET

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


Log4OM
Omnirig
Com 11
Any software
requiring PTT
Com 10
Any software
requiring PTT
Com 10
Com 10
Com 10
VSP Splitter
Com 12
Com 11
Connector
Com 21
Virtual
Serial Ports
Com 12
Connector
Com 22
Com 21
CAT
PowerSDR
Com 22
PTT
(Setup/Cat Control window)
FlexRadio
Hardware

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:

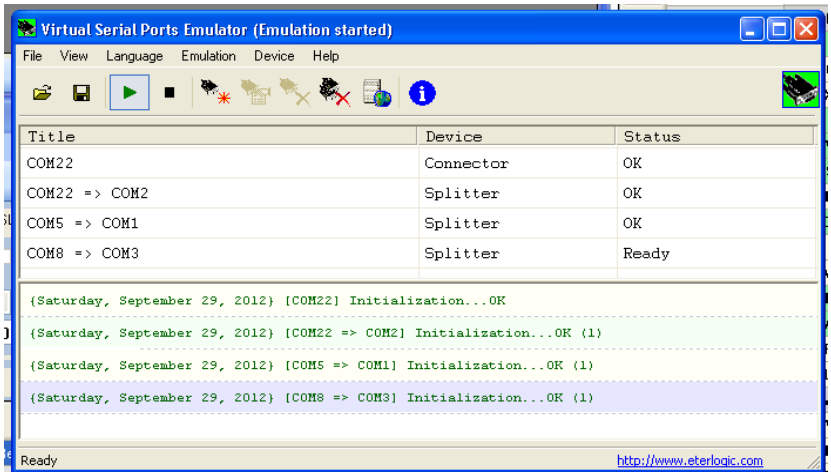
Virtual Serial port emulators: VSPE by Eterlogic
SDR Consoles: PowerSDR/IF, Spectravue, CuteSDR, SDRDX, SDR-Radio
Logging program: Log4OM
CW Software: CW Skimmer, CWtype, DM780
Rotator Control: PstRotatorAz x 2.

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

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.)

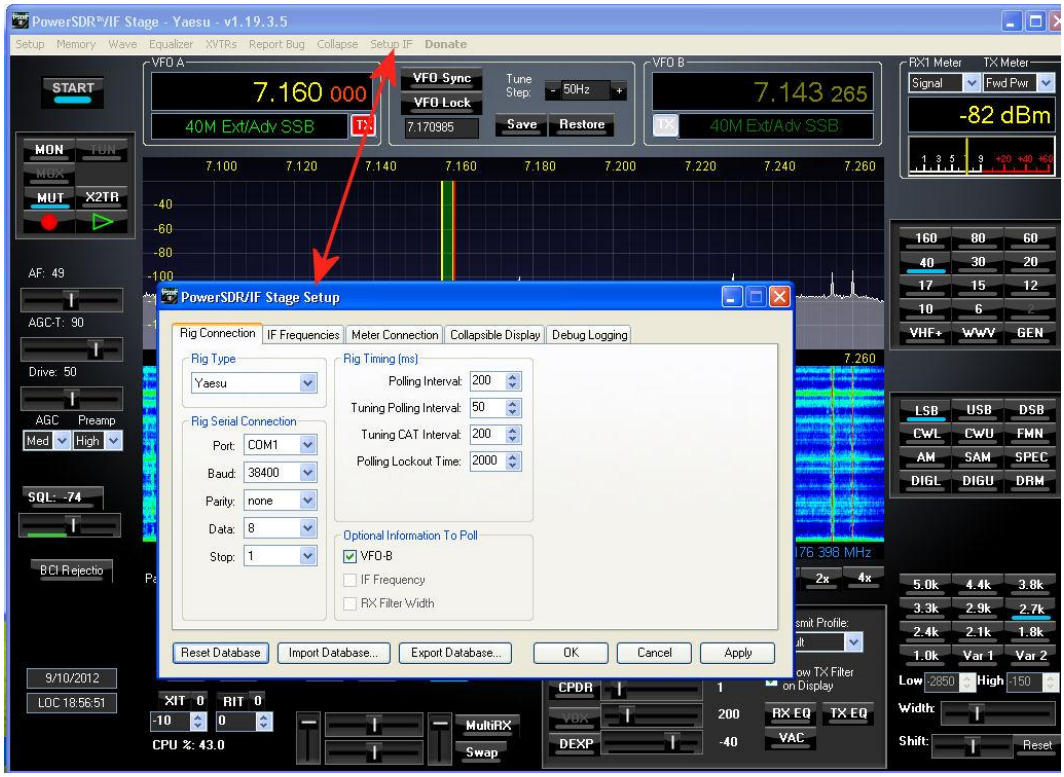


Once the Connector and Com ports splitters are in place, it is important to save them, otherwise the process will have to be repeated the next time the program is started.

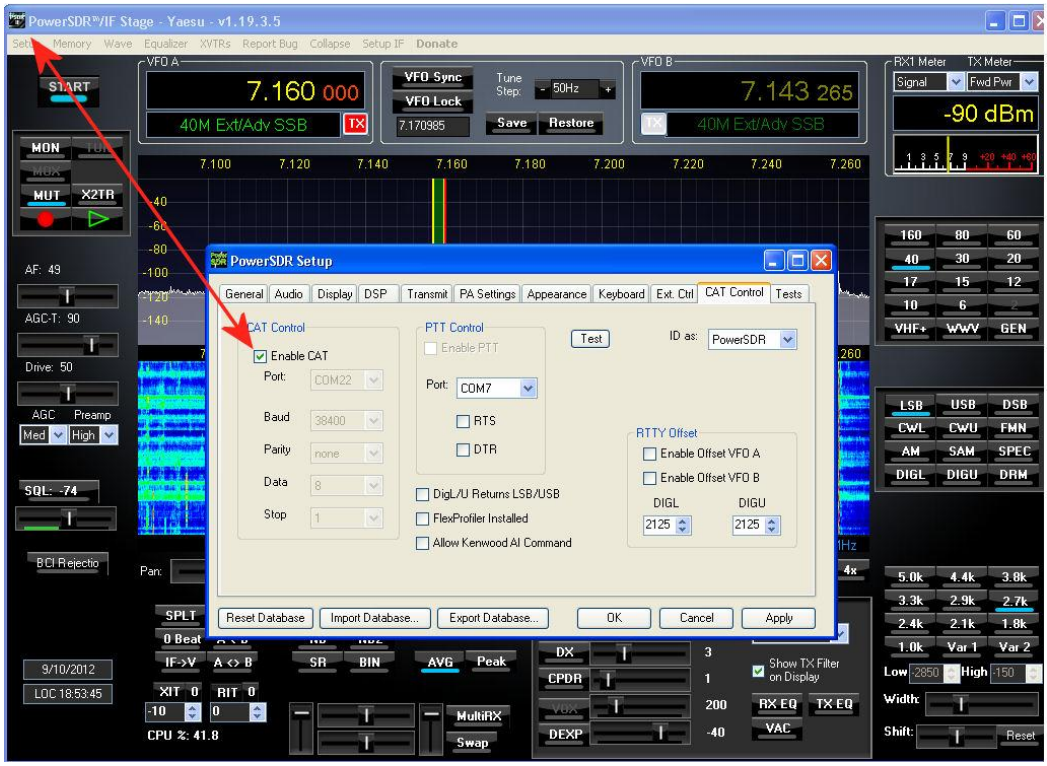
For convenience, VSPE can be loaded automatically upon start-up.

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.

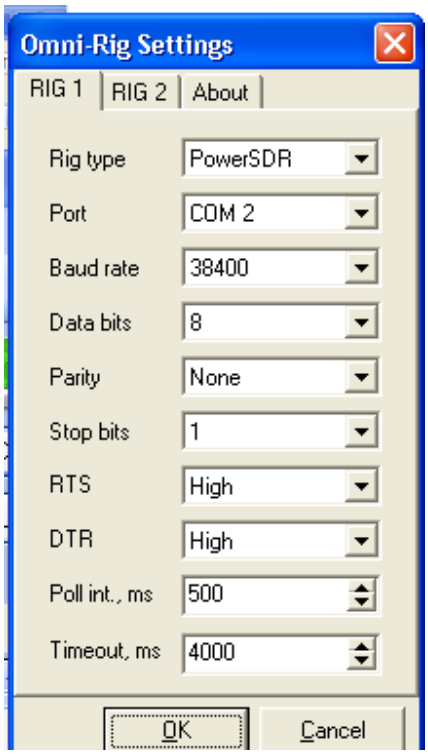
PowerSDR /IF connects to COM1. This connection is shown in the PowerSDR/IF Setup screen below.



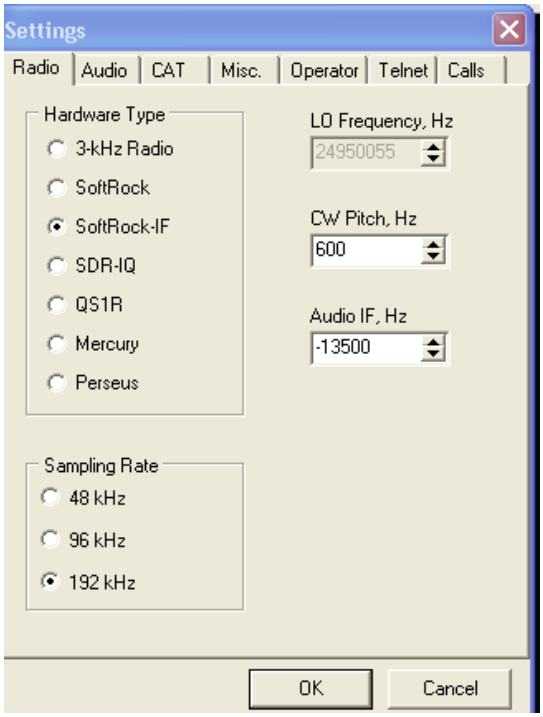
In PowerSDR/IF Setup, set and enable the CAT control. (See screen below) This is the connector 22 created in VSPE. (See screen shot entitled 'VSP Emulator')



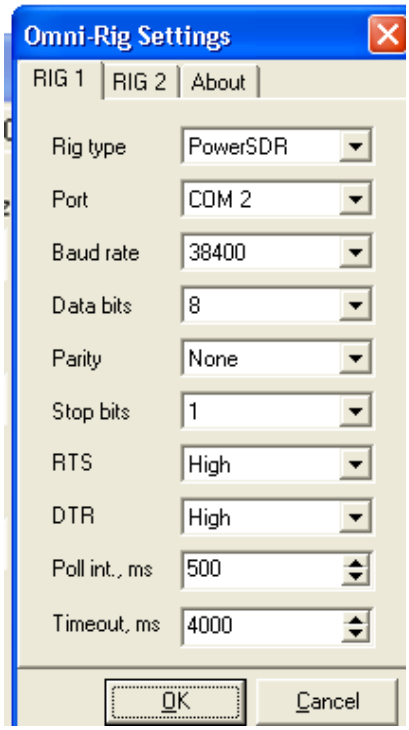
In Log4OM use Omni-Rig to connect to the VSP COM 2, which is one end of the splitter created in the VSPE to the connector Com22.



CWskimmer connects as per the following settings to give CWSkimmer wideband receive capabilities.

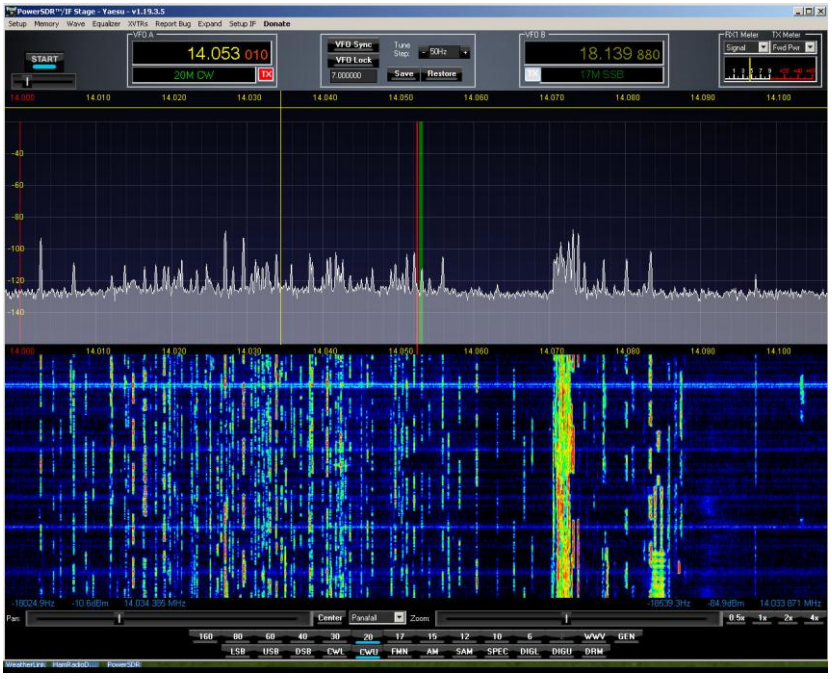


Radio



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.



Summary

LP-PAN with PowerSDR/IF connects through the virtual serial ports, whilst Log4OM and CWskimmer connect through PowerSDR/IF. An added benefit is that a multitude of programs can be used at the same time. e.g. Log4OM, N1MM, DM780, CWskimmer, PowerSDR etc.

FlexRadio Signature Series (6500 and 6700) - Integration

By Don IK2EGL - 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.

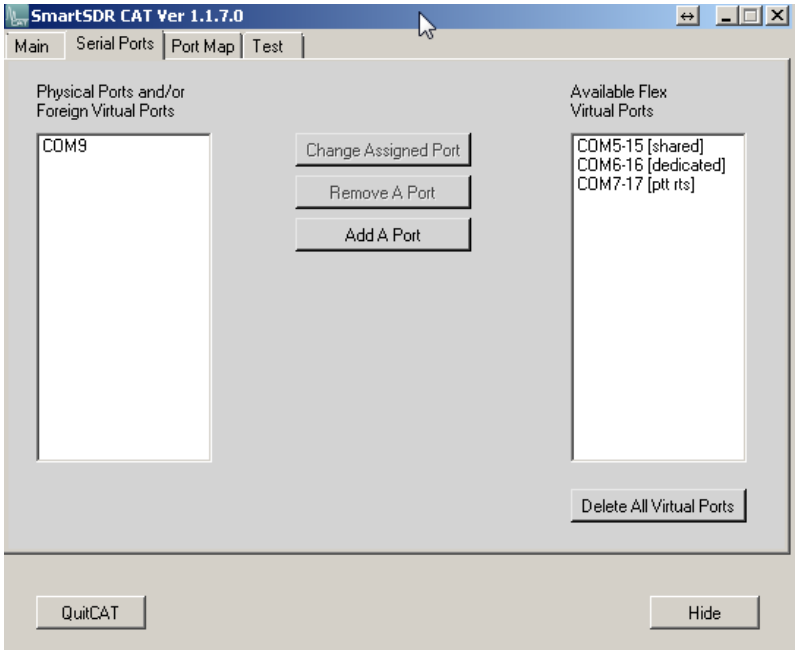
The main application is SMARTSDR, which provides full control of the Flex Transceiver. SMARTSDR shares the all of the audio channels with external applications too with the DAX protocol.

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:

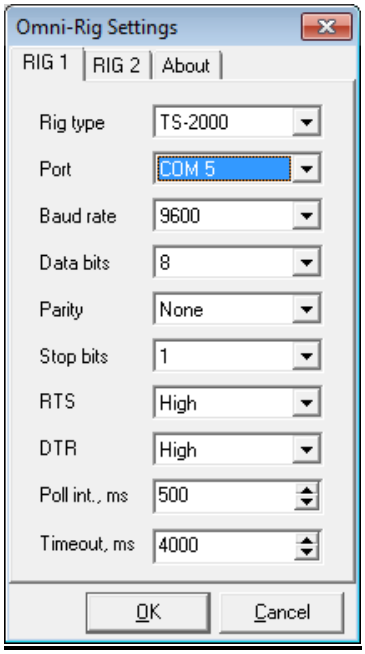
A) Shared ports: used to share cat protocol: creates two ports, the lower is available for the user (com5), the upper one is dedicated to flex itself (com15);

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)

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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