QPLog – QC/ON QSO Party Loogbook

Par/By: Bertrand Zauhar, VE2ZAZ - VA2IW
https://ve2zaz.net
https://github.com/VE2ZAZ
https://www.qrz.com/db/VE2ZAZ

Help Manual

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Document Index

1 Overview

QPLog is a PC software that allows the entry and analysis of radio contacts (QSOs) during the following amateur radio "contest": the Québec QSO Party (QCQP) and the Ontario QSO Party (ONQP). The idea behind the creation of this software was to produce an easy-to-install contest environment, simple to operate, and customized for these two contests. This software project was detailed by Georges-André Chaudron (VE2VAB) and Bertrand Zauhar (VE2ZAZ - VA2IW), with the initial version developed by the latter in 2024.

QPLog is designed for simultaneous participation, if desired, in the QCQP and ONQP. Furthermore, it compiles scores on the fly and independently for each of the two parties, while considering eligible contacts in both contests.
QPLog also allows for mobile operation, accounting for changes in the operator's administrative region (zone) during the contest.

Once the contest is over, QPLog can produce a Cabrillo format file, which the participant submits to the contest organization to formalize their participation and provide the list of QSOs.

QPLog is available in pre-compiled versions for Windows 32/64 bits (7, 8, 10, 11) and Ubuntu Linux (Ubuntu 22.xx, 24.xx). The Linux version may also work on other distributions; it has been verified to run, for example, on Arch Linux. However, certain drivers may be required.
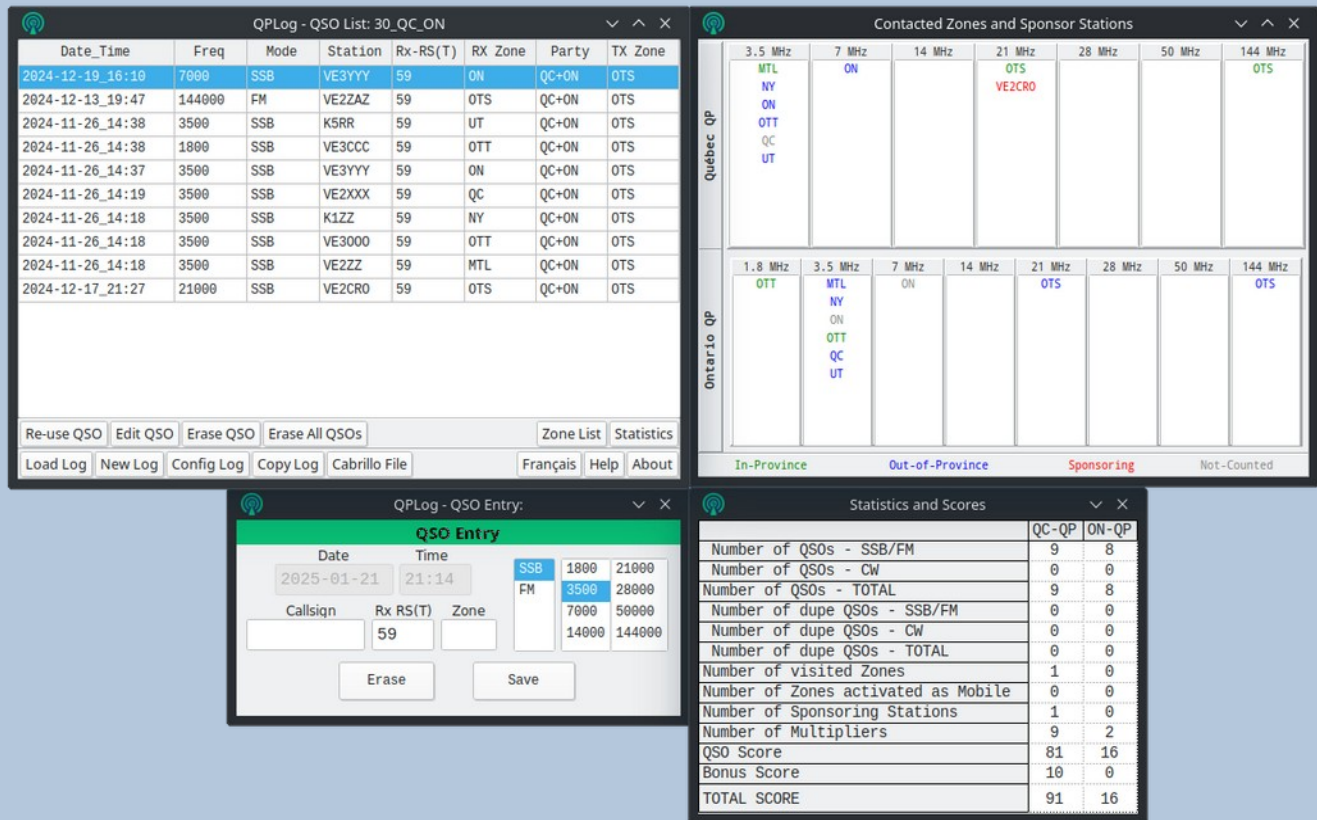

Figure 1: The main windows of the QPLog software in Kubuntu 24.04

2 Installation and Launch of QPLog

The QPLog software consists of a simple executable file. No changes are made to the operating system directories or the Windows registry. It is also not necessary to obtain administrator privileges to use QPLog.

2.1 Installation

Installation simply involves extracting the contents of the ZIP file into a directory of your choice.
In addition to the program executable files, you will find example Log files in the "Logs" folder. This PDF help file can be found in the "Help" folder.

2.2 Launch

The program file to run is "QSO_Party_Logger" for Linux, and "QSO_Party_Logger.exe" under Windows. A simple double-click on the executable file will launch the program.
If, under Linux, launching the program does not produce a window or only opens briefly, the program may detect an error preventing it from launching correctly. Often, calling the same executable file from a command window will provide additional information about the cause of the failure. Common reasons include outdated or missing required libraries, or, more simply, that the executable file is not marked as executable. In this case, simply enabling the executable flag for the file may resolve the issue. An example of the file properties window and its executable flag is shown below.
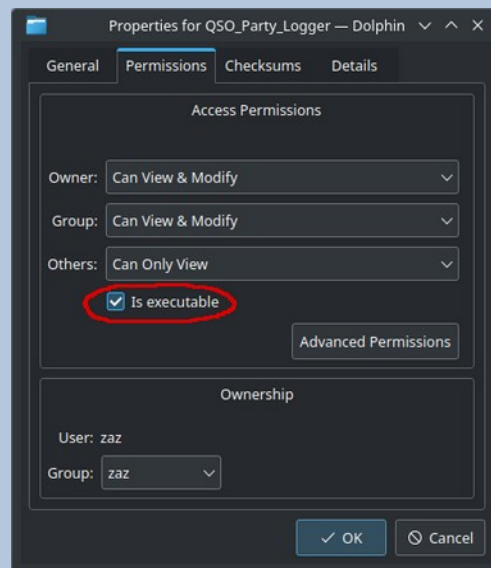

Figure 2: The file properties window in Kubuntu 24.04

3   Using QPLog

The steps for using the QPLog software are intuitive and simple. They follow the typical sequence of a QSO Party.
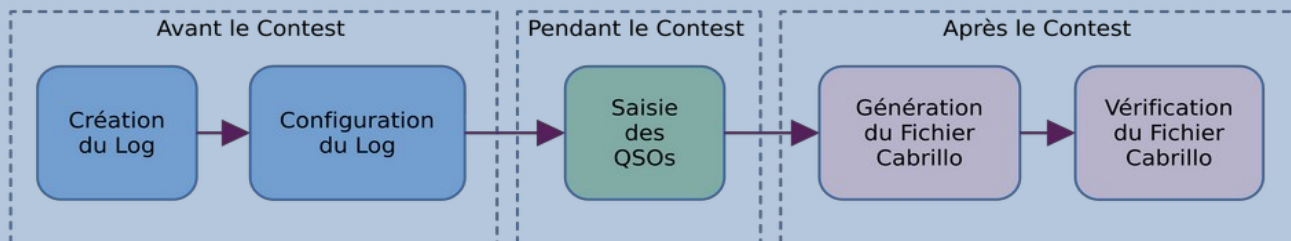

Figure 3: Steps for using QPLog for a QSO Party

In preparation for the QSO Party, the user launches the program. They create a Log using the "New Log" Button . Then they configure various options (choice of QSO Party, participation class, operating zone, etc.) using the "Config Log" Button and Configuration Window. The user can then participate in the contest by entering all QSOs in the QSO Entry Window. Once the contest is finished, the user invokes the "Cabrillo File and Cabrillo File Editing Window" Button, which generates the file and displays it in an editing window. The user can modify its content if needed, and save it. A Cabrillo file is produced for each of the two QSO Parties the user participated in, if applicable. All that remains is to send the Cabrillo file(s) to the organizers of the QSO Parties.

4   Detailed Description

QPLog is displayed across four windows. Two of these are operational and always visible: The QSO List and QSO Entry. The other two windows are informational and displayed optionally: The Contacted Zones and Sponsor Stations, and the Statistics and Scores.
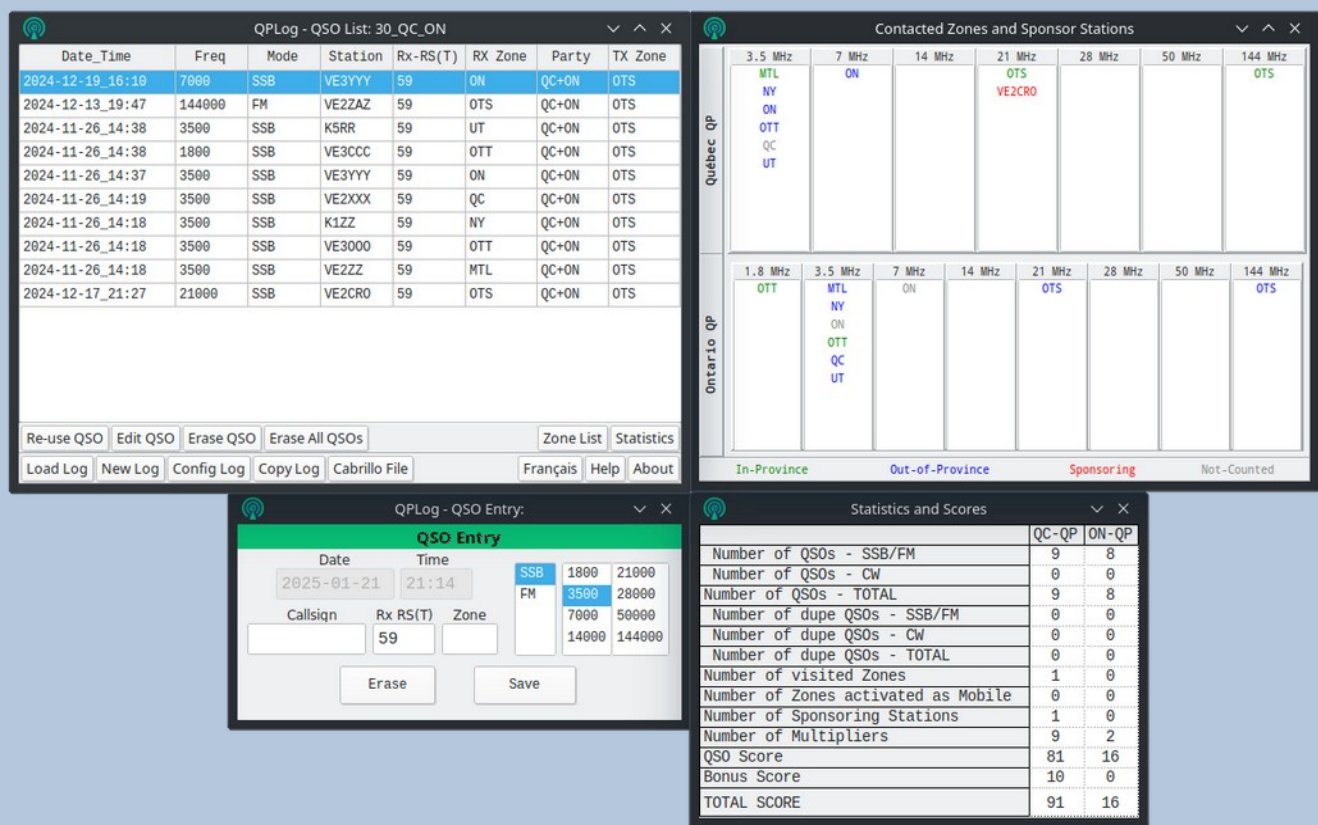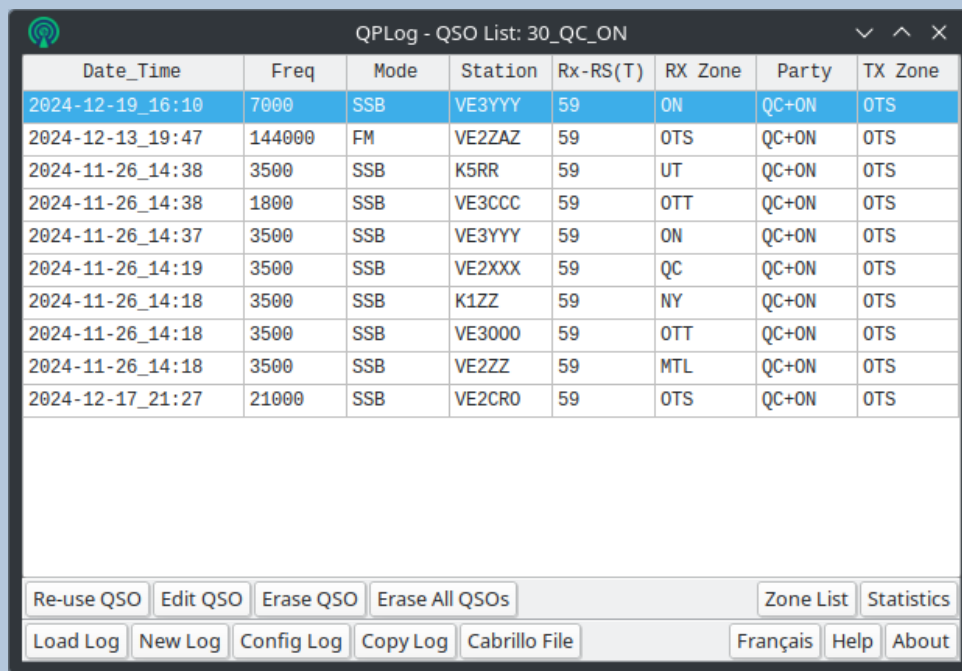

Figure 4: The main windows of the QPLog software

4.1   QSO List Window

The "QSO List" window is the main window of QPLog. In addition to displaying the list of QSOs, it offers a series of buttons for taking action before, during, and after the contest.

Figure 5: The "QSO List" window

QSO List

All relevant information for each completed QSO is shown in this window, one line per QSO. Besides the date and time, frequency, mode, contacted station callsign, received signal report, and the contacted station's zone, the table displays the following information:

- The "Party" column displays the party(ies) the user is participating in, as selected in the configuration window.

- The "Zone Tx" column displays the operating zone (administrative region, county) of the user, as selected in the configuration window. If the user moves from one zone to another during the Party, the operating zones are displayed in this column and associated with the QSOs completed in each zone. The user changes the zone during the Party via the configuration window.

The QSO list offers the following functions:

- Sorting alphabetically by column is enabled by clicking on the desired column header. Repeated clicks on a particular column header will toggle between normal and reverse order. A small green triangle will indicate the sorting column and order.

- The user can right-click on a specific QSO to display a dropdown menu offering a series of actions applicable to the QSO (re-use, edit, or delete the QSO).

- Keyboard shortcuts are implemented. The 'CTRL-E' key combination allows editing the selected QSO in the list to the entry window. The 'CTRL-R' combination retrieves the selected QSO's information to the entry window for re-use in a new QSO with the same

station. More details on editing and re-using actions are available in the <u>Buttons Bar</u> section below.

Buttons Bar

Two rows of buttons are offered at the bottom of the "QSO List" Window. The top row offers actions taken during the contest affecting the QSOs, while the bottom row groups actions affecting the contest (preparation and completion).

- **"Load Log" Button**

This button opens a window for selecting an existing Log to load into the program. Only QPLog type logs (".qplog" extension) can be opened.

- **"New Log" Button**

This button opens a window to create a new log to load into the program. Once the file name and location are provided, an information window will prompt the user to configure the new log. The log configuration window will open as well. More details on log configuration are provided in the <u>"Config Log" Button and Configuration Window</u> section below.

- **"Config Log" Button and Configuration Window**

This button opens the configuration window for the currently loaded log. Several fields <u>must be filled out/configured before proceeding</u> with QSO entry. Once a first QSO is entered, some fields affecting the contest progress cannot be changed.

Figure 6: The "Log Configuration" window

The fields offered in the configuration window are:

- **QSO Party Selection:** The user must choose which contest(s) they want to participate in. The choices are:
  - QC: Participation in the Québec QSO Party only. QSOs with Ontario stations can be entered with the "ON" zone or the three-letter Ontario counties.
  - ON: Participation in the Ontario QSO Party only. QSOs with Québec stations can be entered with the "QC" zone or the three-letter Québec administrative regions.
  - QC+ON: Simultaneous participation in both the Québec QSO Party and Ontario QSO Party. QSOs with Québec and Ontario stations must be entered with their administrative region or three-letter county. Any QSO entered with the "QC" or "ON" zone will be excluded from the associated Party score.
- **Category**:
  - Operation Type: SINGLE-OP (one participant), MULTI-OP (multiple participants forming a team under the same callsign), CHECKLOG (the participant will provide their log to the contest organizers for analysis but does not wish to appear in the final ranking).
  - Station Type: FIXED (station stays at the same location throughout the contest), MOBILE (station moves, possibly changing zones, during the contest).
  - Mode: CW (only CW mode during the contest), SSB / FM (phone mode only during the contest), MIXED (using both CW and phone during the contest).
  - TX Power: HIGH (can use full legal power), LOW (limited to 100 Watts output), QRP (limited to 5 Watts output).
- **Your Station**:
  - *Callsign:* Your callsign, or the callsign used by a group.
  - *Provincial Zone:* For Québec stations, select your administrative region from the 17 official regions. For Ontario stations, select your county from the 50 recognized counties. For stations outside Québec and Ontario, leave the provincial zone selection as "----," which activates the "Location" dropdown menu. For "mobile" operation, the zone can be changed during the Party as you move around.
  - *Location:* For stations outside Québec and Ontario, select your recognized ARRL section. For Québec or Ontario stations, leave the location selection as "----," which activates the "Provincial Zone" dropdown menu.
  - *Full Name, Email, and Affiliated Club:* Required fields for producing the Cabrillo file.

  - *"Copy Log" Button*

This button allows making a copy of the currently loaded log under a different name. Note that the original log remains intact, and the copied version is now loaded into memory.

- ***"Cabrillo File and Cabrillo File Editing Window" Button***

This button generates a Cabrillo file for each of the two QSO Parties, if applicable. The location of the generated Cabrillo files is the same as the location of the log file (.qplog).

As the first step, a "SoapBox" comment entry window appears on the screen for each of the two activated QSO Parties, one after the other. If desired, the user can write comments, such as their opinion of the contest or their evaluation of propagation during the contest. Whether or not comments are added, the user clicks "Continue" to proceed to the next step.
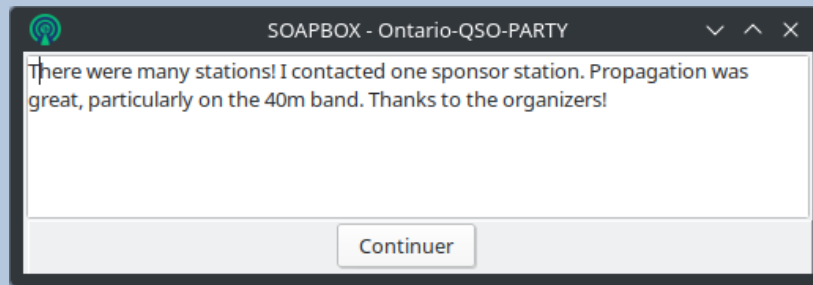
Figure 7: The "SoapBox" comment window

Once the comment entry is completed, an editing window for the Cabrillo file will appear for each of the two activated QSO Parties. If the Cabrillo content is correct and does not need changes, the display/editing window can simply be closed by clicking the "Close" button. If alterations are necessary, they can be made directly in the editing window. The changes will be saved when the "Save Changes" button is clicked.
Note that the header content is partially drawn from the information provided in the Configuration Window (see "Config Log" Button and Configuration Window for more details.

Reminder: YOU ARE RESPONSIBLE FOR THE CONTENT OF THE CABRILLO FILES.
Please review them as necessary to ensure they conform to the expected format and content.
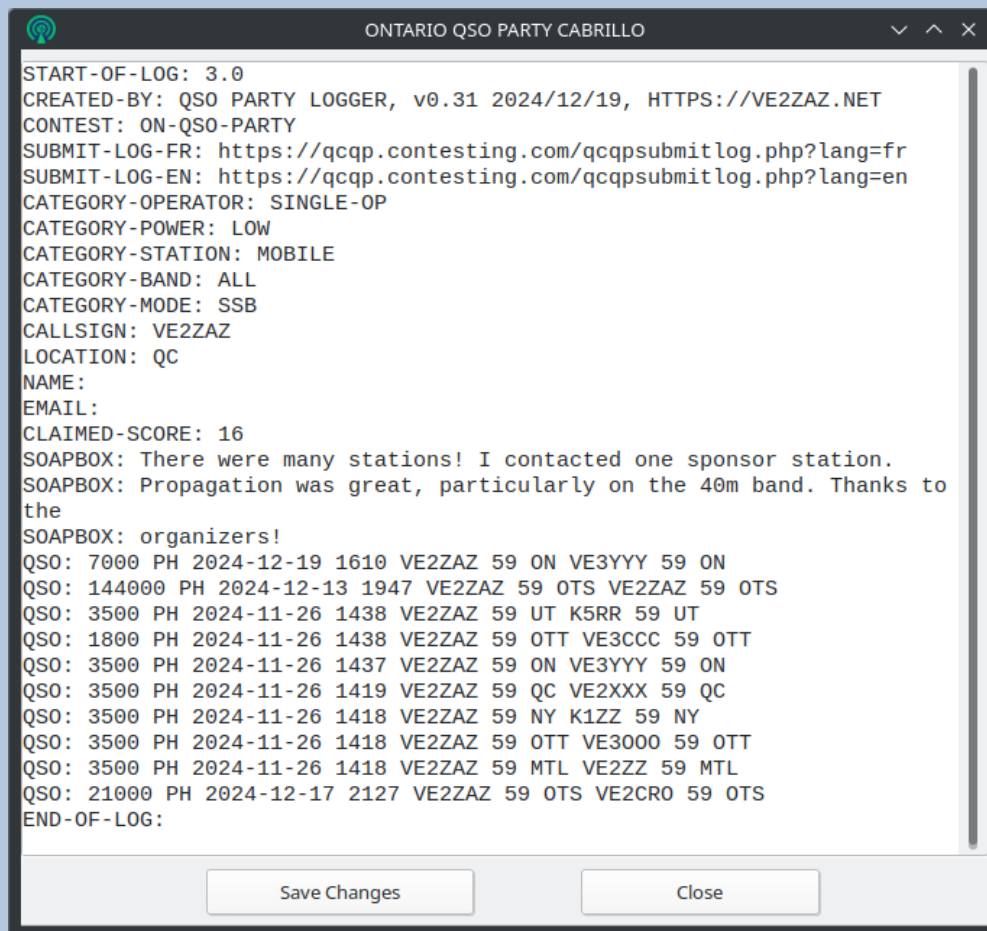
Figure 8: The Cabrillo file edit window

- **"Re-use QSO" Button**

This button allows modifying the information of a previous QSO. The selected QSO's information is transferred to the entry window. The user just needs to modify the QSO information and click the "Edit" button to update the QSO. While editing the QSO, the action banner in the entry window will display "Editing a QSO" in yellow. Duplicate QSO checks are performed during the entry of the QSO modifications.

- **"Edit QSO" Button**

This button allows modifying the information of a previous QSO. The selected QSO's information is transferred to the entry window. The user just needs to modify the QSO information and click the "Edit" button to update the QSO. While editing the QSO, the action banner in the entry window will display "Editing a QSO" in yellow. Duplicate QSO checks are performed during the entry of the QSO modifications.

- **"Delete QSO" Button**

This button deletes the selected QSO from the QSO list. Only one QSO can be deleted per button action. Note that the action is instantaneous and irreversible.

- **"Delete All QSOs" Button**

This action deletes all QSOs from the QSO list. A confirmation window will appear to prevent accidental deletion. Deleting the QSOs is irreversible.

- **"Zones List" Button**

This button opens the "Contacted Zones and Sponsor Stations" window. More details on this window are available in the <u>Contacted Zones and Sponsor Stations Window</u> section.

- **"Statistics" Button**

This button opens the "Statistics" window. More details on this window are available in the <u>"Statistics et Scores" Window</u> section.

- **"English/Français" Button**

This button toggles the software's display language between French and English.

- **"Help" Button**

This button opens this help document in PDF format in the default web browser of the computer. The PDF document is also located in the "Help" folder accompanying the software.

- **"About" Button**

This button opens the information window about the software. To close this window, click the "Close" button.

4.2   QSO Entry Window

The QSO entry window allows entering the details of each QSO during the contest. It also allows correcting a QSO already entered in the Log.

The QSO entry window guides the entry of information in multiple ways:

- By default, the date and time entered are the current UTC values provided by the PC. The only way to modify the date or time of a previously entered QSO is to edit it (via the "Edit QSO" Button).

- The available modes (SSB, CW, FM) correspond to the participation class entered in the configuration window.

- The choice of frequencies corresponds to the eligible frequency bands in the selected QSO Parties.

- All characters entered are converted to uppercase.

- Only allowed characters in a callsign can be used.

- For simplicity, the "sent report" field does not appear in the window. The sent report should always be "59" for phone and "599" for CW.

- The spacebar and tab key allow moving from one field to the next in a loop.

- The "Return" key records the QSO.

- The "Escape" key cancels the entry and clears the fields.
- A real-time duplicate (dupe) check is performed with each keystroke. If a duplicate QSO exists, the QSO entry window will turn orange, and the duplicate QSO(s) will appear in orange in the "QSO List" window. The entry window will return to its default color once the entered information no longer matches a duplicate QSO. The duplicate criteria are: same callsign, received zone, mode, and frequency band. Note that it is still possible to enter a duplicate QSO, as long as you acknowledge a warning window beforehand.

Figure 9: QSO Entry Window

4.3 "Statistics et Scores" Window

The "Statistics and Scores" window displays, in real-time, the statistics and total contest score for each of the two QSO Parties, if applicable. The labels for the rows are quite descriptive.

A distinction is made between the lines "Number of Zones Visited" and "Number of Zones Activated in Mobile," with the latter indicating the operation zones where at least 3 QSOs were completed, thus officially activating the zone.

This window cannot be modified by the user.

	QC-QP	ON-QP
Number of QSOs - SSB/FM	9	8
Number of QSOs - CW	0	0
Number of QSOs - TOTAL	9	8
Number of dupe QSOs - SSB/FM	0	0
Number of dupe QSOs - CW	0	0
Number of dupe QSOs - TOTAL	0	0
Number of visited Zones	1	0
Number of Zones activated as Mobile	0	0
Number of Sponsoring Stations	1	0
Number of Multipliers	9	2
QSO Score	81	16
Bonus Score	10	0
TOTAL SCORE	91	16

Figure 10: Statistics and Scores Window

4.4 Contacted Zones and Sponsor Stations Window

The "Contacted Zones and Sponsor Stations" window provides, in real-time, the list of contacted zones and locations for each valid frequency band.

A color distinction is made between the zones within the operating province (green) and zones outside the province (purple). Note that non-scored zones are displayed in gray. Additionally, contacted sponsor stations are shown in red. All this information is displayed for each of the two QSO Parties, if applicable.

This window cannot be modified by the user.

Figure 11: La fenêtre des Zones et Stations Commanditaires Contactées

5   Various Operating Notes

- The log content is updated and saved after every QSO entry, modification, or deletion. Therefore, no manual saving is required during the contest.

- A backup copy of the log file is created in the same directory as the ".qplog" log file. The backup file is created before any action on the log. This file has the ".qplog_bak" extension. This backup file could serve as a "last resort" to undo an unwanted action on the log, but it requires manual intervention outside of the program to correctly replace/rename the ".qplog_bak" file as the ".qplog" file.

- The log configuration is saved in the log file with the ".qplog_cfg" extension. This file accompanies the ".qplog" file and should not be manually modified by the user.

- A program configuration file is created the first time the program is run and updated every time the program exits. The configuration file is named "Session.cfg" and is located in the same directory as the program file. The user should not modify this file at any time.

- It is important to ensure that the PC on which QPLog is running has its date and time correctly adjusted. The validity of the log depends on this.

- The entry of duplicate QSOs, while undesirable, is not penalizing in terms of contest score. This is why the software allows duplicates.

- Entering a three-letter zone from the other province (instead of "ON" during the QCQP) is supported by QPLog to allow the entry of multiple QSOs from mobile stations traveling between different zones within the other province.

- Mobile operation is supported by QPLog. To allow this, the operating zone can be changed during the Party via the configuration window as the operator moves. The operating zone will be displayed for each completed QSO in the QSO list, under the "Tx Zone" column.

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7 References

The Cabrillo Specification V3:
https://wwrof.org/cabrillo/

Québec QSO Party:
https://quebecqsoparty.org/

Ontario QSO Party:
http://www.va3cco.com/oqp/

VE2ZAZ Site Web / Web Site:
https://ve2zaz.net