

ZZALOG

Logging Application



User Guide

v3.6.1-rc1 15th July 2025

Introduction

ZZALOG is a logging application that provides the following functionality:

1. Records QSOs in a logging database.
2. Allows the database to be searched.
3. Allows the real-time and off-line entry of QSO records.
4. Allows the user to monitor “worked-before” status in real-time.
5. Exchanges data with QSL web-sites such as eQSL.cc and Logbook of the World.
6. Tracks the status of electronic and paper QSL cards and displaying images of received cards.

ZZALOG maintains the QSO records in the ADIF .adi format. This allows manual editing, if approached carefully. ZZALOG may not be tolerant of error introduced by manual editing.

Although ADIF .adi format does not support the use of non-ASCII character sets, ZZALOG provides support for all Unicode characters coded in UTF-8 format. Exchange of such data with other applications may result in errors.

Installation

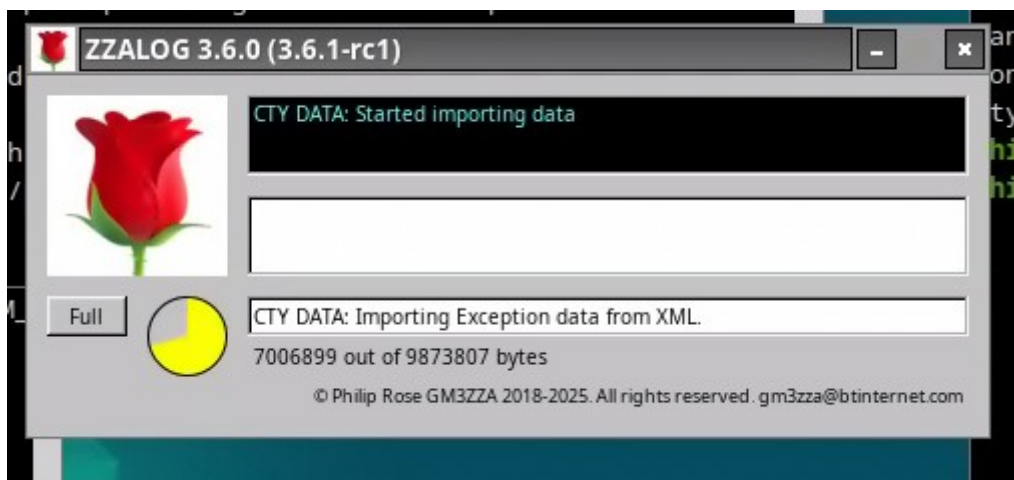
Installation can currently only be done on an ad-hoc basis. This document currently assumes that installation has already been done by the application's author.

The application has been compiled for Windows and Linux environments.

Starting ZZALOG

On Windows, ZZALOG may be started by double clicking on the icon. It may also be started from a terminal by advanced users.

On starting, a banner window is displayed:



This shows the progress of the application as it is loading all the data needed to run. This window shows the latest message output, the latest error message output and the progress of each

stage. In the above image, the application is reading in the latest callsign parsing information file and the banner shows the progress in numerical form and in a clock dial form. The “Full” button, when clicked, expands the display to show a scrollable output of all the messages output. Once ZZALOG has loaded then two or three more windows are displayed. Firstly there is a log-book style view of the log data:

QSO No.	Date	Start	End	QRG	Band	Mode	Callsign	Sent	Rcvd	Pwr	Name	QTH	Loc	STATE
9140	20250626	184920	191034	145.575000	2M	FM	2M0KRG	59	10	10	Livingston		IO85FV	
9139	20250626	183245	191034	145.575000	2M	FM	MM7GJY	59+30	10	10				
9138	20250626	183239	191034	145.575000	2M	FM	MM0KKL	59+5	10	10				
9137	20250626	183229	191035	145.575000	2M	FM	2M0VSA	59+10	10	10				
9136	20250626	183213	191035	145.575000	2M	FM	MM0KFR	59+30	10	10				
9135	20250626	183205	191035	145.575000	2M	FM	GM0ERT	59+20	10	10				
9134	20250626	183159	191036	145.575000	2M	FM	2M0DIF	59	10	10				
9133	20250626	183036	191036	145.575000	2M	FM	MS0LIV	59+30	10	10				
9132	20250626	151711	151811	145.012500	2M	FM	GM0ERT		0					
9131	20250622	213245	213330	7.074400	40M	FT8	2E0MRK	+07	+05	49	Mark	High Wycombe	IO91PP	
9130	20250622	213145	213230	7.074400	40M	FT8	2E0XDZ	-03	-03	49			IO91	
9129	20250622	212945	213030	7.074400	40M	FT8	DL4XT/GRP	-01	+01	49			JO53BO	
9128	20250622	212700	212745	7.074873	40M	FT8	I280FL	+00	+00	49			JN70SN	
9127	20250622	212230	212415	7.074873	40M	FT8	DG1WSK	-13	-06	49			JN58	
9126	20250622	212100	212145	7.074873	40M	FT8	DJ7XY	-06	-01	49			JO31	
9125	20250622	211806	211915	7.074873	40M	FT8	SM7OYE	+06	-07	49			JO65	
9124	20250622	211130	211215	7.074873	40M	FT8	EH1HSJ	+06	-10	49			IN73	
9123	20250622	210900	210945	7.074873	40M	FT8	OM/OK8VK	-08	-09	49				
9122	20250622	210700	210745	7.074873	40M	FT8	PY7ZZ	-04	-12	49			HI21	
9121	20250622	210600	210645	7.074873	40M	FT8	IK4ICS	-08	-13	49			JN54	
9120	20250621	201315	201400	21.076147	15M	FT8	UR4QWW	+00	-15	49			KN77NU	
9119	20250621	201046	201130	21.076147	15M	FT8	F5PBG	+08	-02	49			IN78TI	
9118	20250621	194215	194318	28.075832	10M	FT8	7Q6UJ	-10	-17	49				
9117	20250620	203430	203430	14.075832	20M	FT8	M7GGV	-14	-06	50			IO91	
9116	20250620	202930	203130	14.075832	20M	FT8	ON7KEI	-08	-03	50			JO21RF	
9115	20250620	195545	195645	50.314748	6M	FT8	YT7KW	-09	-05	51			KN05EJ	
9114	20250620	195515	195515	50.314748	6M	FT8	OM3RP	-14	-11	51				
9113	20250620	193630	193630	50.314748	6M	FT8	MM/ER1DFV	-14	-24	51			IO75TT	
9112	20250620	193530	193530	50.314748	6M	FT8	UA7BI T	-01	-12	51			IN78TI	

Illustration 1: Log-book view

In Illustration 1: Log-book view a section of the log-book showing the most recent entries is displayed. In this view the data that is presented can be configured by selecting different fields to be displayed. The data can be displayed either in chronological order or in reverse chronological order. More information about this window is given later.

Secondly, a dashboard view is available: in Illustration 2: Dashboard view ZZALOG provides the user with the ability to enter new QSOs, edit existing QSOs, browse the log and manage all the data exchange functionality.

Finally, if ZZALOG is so configured, a third window is displayed. This is used, for example, for a club operation where the information about individual operators is required:

ZZALOG 3.6.0 (3.6.1-rc1): Operating Dashboard

QSO Data

QTH
Livingston
Show
Operator
PVR
Show
Station Callsign
GM3ZZA
Show

QSO Entry - 2M0KRG - read only

MY_RIG
IC-705
MY_ANTENNA
Diamond V-2000

QSO_DATE
20250626
TIME_ON
184920

TIME_OFF
191034
CALL
2M0KRG

FREQ
145.575000
MODE
FM

TX_PWR
10
RST_RCVD

RST_SENT
59
NAME

QTH
Livingston
GRIDSQUAR
IO85FV

CNTY
MY_CITY
Livingston

MY_GRIDSQ
IO85FU69
OPERATOR
GM3ZZA

MY_IOTA
EU-005
CONT
EU

STATION_CA
GM3ZZA
CONTEST_ID

NOTES

previous
DX?
QSL
Contest

Contest
Start
Finish

Exchanges
RX
TX
0
Parse

Scores
QSOs
QSO pts
Mult.
Total
Log
+Δ
=

Controls

Edit QSO
Cancel
Activate
Start QSO
Edit Net
Start Net
Browse Log

IC-705

Disconnected
VFView WAN

Display instantaneous
Connect
Select
Start

Rig
NET rigctl
Antenna
Diamond V-2000

Connection
Auto
Default

Use Show
Show
Host:Port
localhost:4533

UTC
GMT Summer Time

15:17:25
Tue 15 Jul 2025

Log
QSLs
Apps
WX
Bandplan

Only handle selected QSO
eQSL
LotW
ClubLog
QRZ.com
Cards
e-Mails

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Illustration 2: Dashboard view

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Configuration: Define QTH, Operator and working calligns

File Locations Web/Network Fields **Station** User config QSL Design Contest Def. **All Settings**

QTHs **Operators** Callsigns

Please select or enter the initials of the person intending to operate (NECESSARY for a club station).
Add the operator's name and callsign.

Id

Brief

Comment

Enter data below if you want the information saved in the log file

Name

Callsign

Save OK Cancel

Illustration 3: Operator selection

In Illustration 3: Operator selection the user is being asked to identify themselves. The field labeled “Id” has a drop-down menu so that the user can select themselves or if not listed type in their initials (or callsign suffix). The user can then enter their name and callsign if mandated by the station policy. In Illustration 4: Filled in operator details below this information has been filled in.

Id

Brief

Comment

Enter data below if you want the information saved

Name

Callsign

Illustration 4: Filled in operator details

To start operating we shall need to connect to a rig.

Operating

Connecting to a rig.

ZZALOG uses the hamlib library for its rig connectivity. The hamlib library is a suite of procedure calls that provides a common interface for most rigs' CAT interfaces. It can also interface with a number of other applications that provide access to rigs' CAT interfaces. Most CAT interfaces use some form of serial interface, and shared access to a serial interface by different applications (such as ZZALOG and any digital modem applications – PSK, FT8, SSTV etc) requires another helper application such as flrig.

ZZALOG can provide a means of starting this helper application, which requires the use of scripts. For now, we'll manually launch flrig and then connect to it:

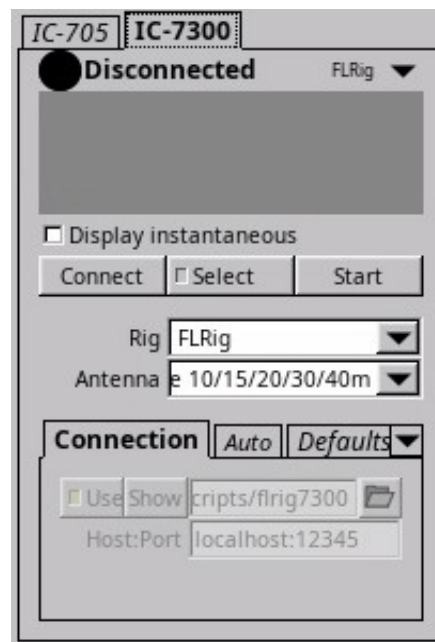


Illustration 5: Rig control

In the bottom left of the dashboard is Illustration 5: Rig control screen. The user should select the rig that they are interested in. In this case an ICOM IC-7300. The “Start” button will launch a script, if written, to open up the FLRig application. The “Select” button allows configuration of the interface. These two features will be described in more detail later. Assuming that FLRig has been launched then clicking the “Connect” button will connect to that application. Illustration 6: FLRig connected shows ZZALOG connected to FLRig and the latter's display alongside. ZZALOG is showing the same frequency, mode, TX power and S-meter reading as FLRig, and the rig itself. ZZALOG will normally show the highest S-meter and TX power meter readings over the most recent few polls of the rig, and retain the last S-meter reading from a RX period and the last TX Power reading from a TX period.

Note that the “Connect” button has become a “Disconnect” button.

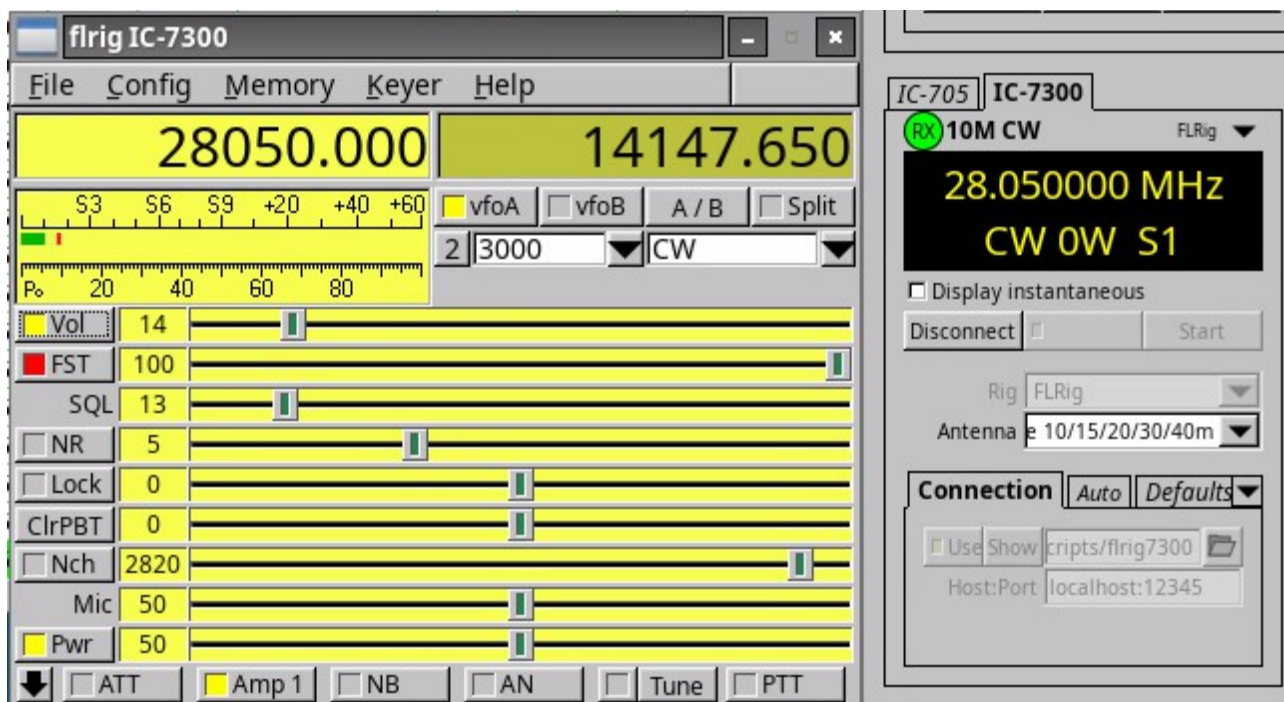


Illustration 6: FLRig connected

Operating

To operate, the user must place ZZALOG into the correct mode. This is achieved by clicking the “Activate” button on the “Controls” section – see Illustration 2: Dashboard view. This changes the “QSO Entry” section:

QSO Data

QTH Show Operator Show

QSO Entry - prepared for real-time logging.

MY_RIG	<input type="text" value="IC-7300"/>	MY_ANTENNA	<input type="text" value="Trap dipole 10/1"/>
QSO_DATE	<input type="text" value="20250715"/>	TIME_ON	<input type="text" value="160352"/>
TIME_OFF	<input type="text"/>	CALL	<input type="text"/>
FREQ	<input type="text" value="28.050000"/>	MODE	<input type="text" value="CW"/>
TX_PWR	<input type="text" value="0"/>	NAME	<input type="text"/>
QTH	<input type="text"/>	RST_RCVD	<input type="text"/>
RST_SENT	<input type="text"/>	GRIDSQUARE	<input type="text"/>
COUNTRY	<input type="text"/>	APP_ZZA_OP	<input type="text"/>
MY_NAME	<input type="text" value="Phil"/>	OPERATOR	<input type="text" value="GM3ZZA"/>
DXCC	<input type="text"/>	MY_GRIDSQU.	<input type="text" value="IO85FU69"/>
MY_CITY	<input type="text" value="Livingston"/>	BAND	<input type="text" value="10M"/>

NOTES

Controls

Start QSO	Add QSO	Edit QSO	Copy QSO	Clone QSO	Quit	Save
View QSO						

Illustration 7: Dashboard ready for operation (“Activated”)

Illustration 7: Dashboard ready for operation (“Activated”) shows the “QSO Entry” section ready for entry. All the fields shown may be swapped for other fields by selecting the drop-down arrow alongside each. Each field has an associated data entry widget: for some of these the drop-down arrow opens up a menu of possible values:

NOTES

I:-->ignore or invalid
N:-->no
R:-->requested
V:-->verified
Y:-->yes (confirmed)

Illustration 8: Menu of choices

Fred
FRED
fred
Fred
GM3ZZA
IO85FU69
10M

Illustration 9: Menu of formats

Illustration 8: Menu of choices and Illustration 9: Menu of formats show examples of this selection.

At this point it is also possible to check on the “worked-before” status of a call. Typing in a callsign that has been copied will result in that call being checked against the history contained in the log. Examples are below:

QSO Entry - prepared for real-time logging.

MY_RIG	IC-7300	MY_ANTENNA	0/15/20/30/40m
QSO_DATE	20250715	TIME_ON	184132
TIME_OFF		CALL	ON3TLA
FREQ	28.050000	MODE	CW
TX_PWR	0	NAME	Fred
QTH		RST_RCVD	
RST_SENT		GRIDSQUARE	
COUNTRY	BELGIUM	APP_ZZA_OP	
MY_NAME	Phil	OPERATOR	GM3ZZA
QSL_RCVD		MY_GRIDSQU.	IO85FU69
MY_CITY	Livingston	BAND	10M

NOTES

Previous ☒ **DX?** ☐ **QSL** ☐ **Contest** ☐

ON3TLA

NAME	
QTH	
GRID	JO10
STATE	

Date	Band	Mode	Wkd Call
20250702	40M	FT8	ON3TLA

Illustration 10: Checking "worked-before" status for a call

QSO Entry - prepared for real-time logging.

MY_RIG	IC-7300	MY_ANTENNA	0/15/20/30/40m
QSO_DATE	20250715	TIME_ON	184400
TIME_OFF		CALL	PZ2ZZ
FREQ	28.050000	MODE	CW
TX_PWR	0	NAME	Fred
QTH		RST_RCVD	
RST_SENT		GRIDSQUARE	
COUNTRY	SURINAME	APP_ZZA_OP	
MY_NAME	Phil	OPERATOR	GM3ZZA
QSL_RCVD		MY_GRIDSQU.	IO85FU69
MY_CITY	Livingston	BAND	10M

NOTES

Previous ☒ **DX?** ☒ **QSL** ☐ **Contest** ☐

PZ2ZZ **QRZ.com**

PZ: SURINAME
 Default decode
 SA: CQ Zone 9. Loc: 4°N 56°W (PFX)
 Distance 7395km, Bearing 240°

Worked Before?

	ANY	10M	CW
GM3ZZA			
PZ	✓	NEW	NEW
Grid	?	?	?
CQZ 9	✓	NEW	NEW
SA	✓	✓	NEW

Illustration 11: Checking "worked-before" status for a DXCC entity

Illustration 10: Checking "worked-before" status for a call shows the callsign being checked. In this case the station has been worked before but not on the band on the rig (10m – whereas they were worked before on 40m) or one the mode (FT8 versus CW). Illustration 11: Checking "worked-before" status for a DXCC entity shows the call being decoded as in DXCC Suriname, continent SA (South America) and CQ Zone 9. All three of these have been worked before, but this shows that Suriname is a new DXCC on 10m and also on CW. Similarly for CQ Zone 9. South America has been worked on 10m but is a new continent on CW.

Logging the QSO

In the “Activated” state the commands available are:

Controls

Start QSO	Add QSO	Edit QSO	Copy QSO	Clone QSO	Quit	Save	Delete QSO	Start Net	Browse Log
View QSO									

Illustration 12: Commands in "Activated" state

“Start QSO” - moves ZZALOG to “Enter QSO” state with any details already typed in are kept.

“Add QSO” - will start logging a QSO that has already occurred.

“Edit QSO” - will enable editing a QSO that has already been logged.

“Delete QSO” - will remove the QSO from the log.

“View QSO” - will open the selected QSO for viewing – and checking DXCC status etc.

Clicking “Start QSO” will cause the QSO date and time and the information obtained from the rig to become fixed. It also makes a new set of commands available:

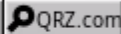
Controls									
Save	Save & View	Save & New	Save & Edit	Quit QSO	Start Net	U/d Station	B4?	DX?	 QRZ.com

Illustration 13: Commands in "Enter QSO" state

“Save” - completes the logging, by setting TIME_OFF field and reverts to “Activated” state.

“Save & View” - saves the logging, and keeps the QSO open for viewing.

“Save & New” - saves the logging, and starts a new QSO.

“Save & Edit” - saves the logging, but keeps the QSO in edit mode for further updates.

“Quit QSO” - cancels the logging and removes the QSO from the log.