

The COOL

A unique online QSO logging system

with programmatic evaluation

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Technologies used with The COOL

Full stack

HTML
CSS
Javascript
PHP
MySQL
EasyUI

Integrated Development Environments (IDE's)

Visual Studio Code

Testing environment (Linux)

LAMP

The COOL CW Operators Club - Blog

Wordpress, Blocksy theme

Host4Africa “Tungsten” hosting

www.radarops.co.za

RaDAR Sport offline logger

Lazarus 2.2.0

The COOL - An intelligent system

The COOL (Sorted by Date and Time) [Version 3.0 November 2023]												
New Log Edit Log Delete log <input type="text" value="Search callsign"/> Export page to Excel Print screen Prepare for ADIF download Download ADIF Upload ADIF Reload												
	Callsign	Other	Comments	Date (YYYY-MM-DD)	Time (UTC)	Frequency (MHz)	Mode	Power	QSL	Grid locator	Others Grid	Check
1	ZS1CF	KX9DX	USA	2023-12-26	16:01:00	28.0250	CW	100W		JF96av		
2	ZS6BNE	CQ	CQ FOR 15 MINUTES	2023-12-26	15:50:00	7.0300	CW	QRP		KF18BK23ED	NIL	
3	ZS5DUV	ZS6FN	NICE 3 WAY QSO	2023-12-26	14:37:00	7.0300	CW	QRP		KX		
4	ZS6MSW	ZS5DUV	THREE WAY GROUP QSO	2023-12-26	14:35:31	7.0300	CW	100W		KG33XV	KG52TQ	
5	ZS6MSW	ZS6FN		2023-12-26	14:35:17	7.0300	CW	100W		KG33XV	KG43DT	
6	ZS6MSW	ZS5DUV		2023-12-26	14:22:00	7.0300	CW	100W	Y	KG33XV	KG52TQ	Y
7	ZS5DUV	ZS6MSW	QSB AGAIN	2023-12-26	14:21:00	7.0300	CW	QRP	Y	KG52TQ	KG33XV	Y
8	ZS5PG	ZS6MSW	QSB	2023-12-26	14:09:00	7.0300	CW	100W		KG		
9	ZS6BNE	ZS5PG	S599 100W R229	2023-12-26	13:54:00	7.0200	CW	QRP	Y	KF18B119FI		
10	ZS5PG	ZS6BNE	VERY LOW DOWN	2023-12-26	13:54:00	7.0200	CW	100W	Y	KG		
11	ZS6BNE	ZS6UT	S599 R589	2023-12-26	13:47:00	7.0300	CW	QRP	Y	KF18B119FI	KG44DE	
12	ZS6UT	ZS6BNE		2023-12-26	13:44:00	7.0300	CW	QRP	Y	KG44DE		
13	ZS6MSW	ZS6BNE	NO SIGHTINGS	2023-12-26	13:42:00	7.0300	CW	100W	Y	S31.705958 E21.916956	KF18B119FI	Y
14	ZS6BNE	ZS6MSW	599 MIKE	2023-12-26	13:41:00	7.0300	CW	QRP	Y	KF18B119FI	S31.705958 E21.916956	Y
15	ZS6UT	ZS6MSW		2023-12-26	13:32:00	7.0300	CW	100W	Y	KG44DE		

15 Page 1 of 648 Displaying 1 to 15 of 9720 items

1. All the fields you would normally find with any amateur radio logbook. Times in UTC, Frequency in MHz, Mode, own callsign (associated with your registered PIN) and the other station's callsign.

2. Note there are no RST fields. They are just a waste of time as most are always five nine. True reports can be logged in the comments field, if deemed important.

3. Power levels are good to know and to share. Sharing is the basic idea behind The COOL.

4. The QSL fields flag correct QSO data considering that both stations log on The COOL. Times must be within five minutes of each other. QSO end times are best to log for accuracy.

5. The Grid locator and Other Grid are special fields, well they are for recording grid locations or decimal coordinates or anything else. These fields are also used to store exchange information and are evaluated and checked automatically. The successful results are flagged in the Check field.

Note: Simple contest exchanges can be entered here too!

6. New logs can be manually entered, edited and if needed, deleted using the menu buttons.

7. Specific callsigns can be searched for using the search box. Usually used to list your own logs.

8. The displayed logbook can be exported to an Excel file or printed. The page row count can be set as needed.

9. Logs can be downloaded to an ADIF file to upload into other systems.

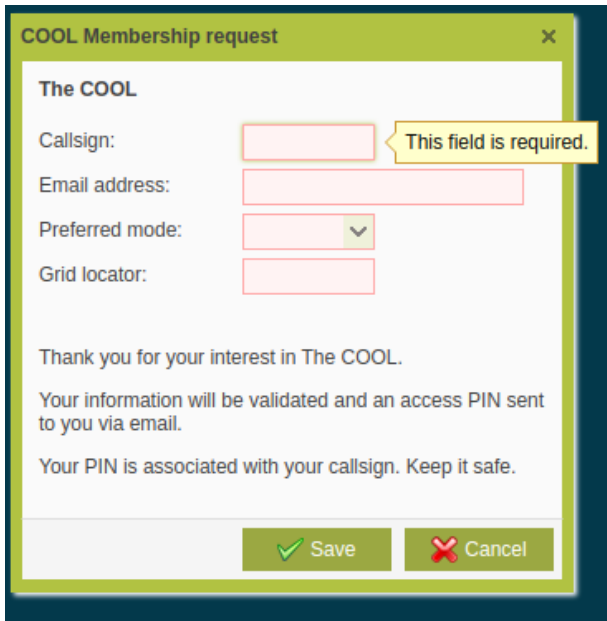
10. Logs can be uploaded from an ADIF file created by another system

The COOL is a unique, intelligent and versatile system!

The COOL – Security

The COOL has an in house developed PIN based security system to prevent any abuse of the system. A PIN is issued to a radio amateur to enable him / her to use The COOL.

1. Applications are done by sending information to the COOL admin online where it is stored on a database for validation and processing.



COOL Membership request

The COOL

Callsign: This field is required.

Email address:

Preferred mode:

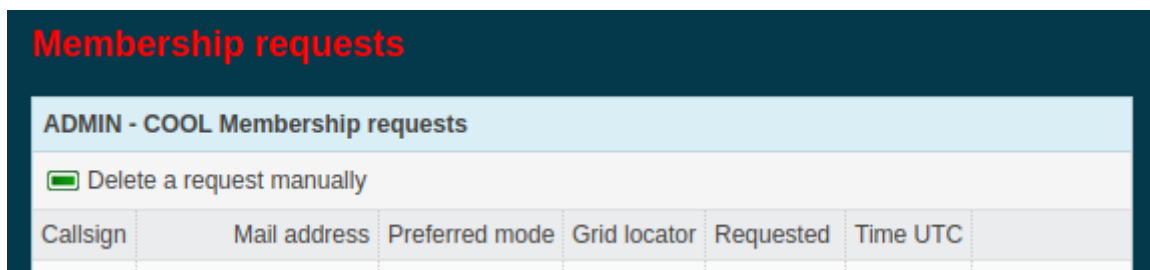
Grid locator:

Thank you for your interest in The COOL.

Your information will be validated and an access PIN sent to you via email.

Your PIN is associated with your callsign. Keep it safe.

2. The admin, at this stage, processes each request manually. The request is deleted if it does not pass validation. QRZ dot com and the SARL database are used to cross reference requests.



Membership requests

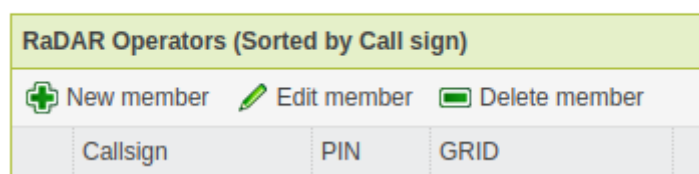
ADMIN - COOL Membership requests

Delete a request manually

Callsign	Mail address	Preferred mode	Grid locator	Requested	Time UTC
...

3. The admin allocates a PIN which is associated with the callsign. The grid locator is stored and is automatically added to the logs if no other locator is entered. The PIN is then sent to the radio amateur via email or WhatsApp.

RaDAROPs PIN Registration



RaDAR Operators (Sorted by Call sign)

Callsign	PIN	GRID
...

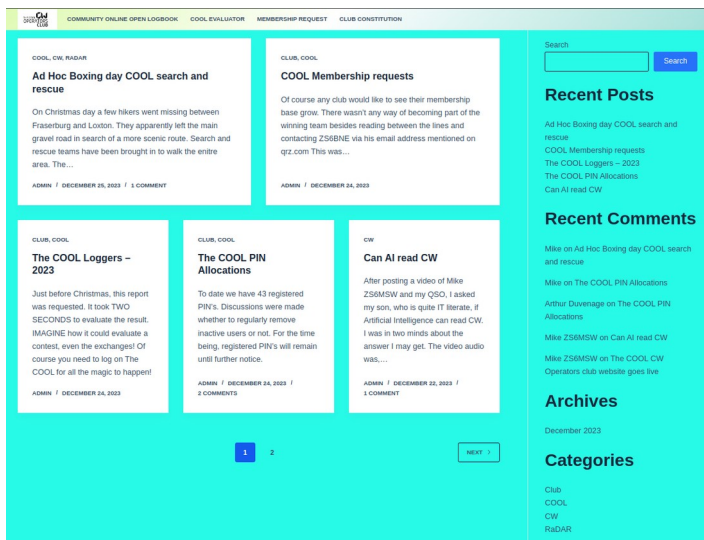
The COOL CW Operators Club

A Wordpress blog was created for the newly formed COOL CW Operators Club on the same platform as The COOL itself. The CW operators were regular users and so it was a natural progression to bring the club and The COOL together.

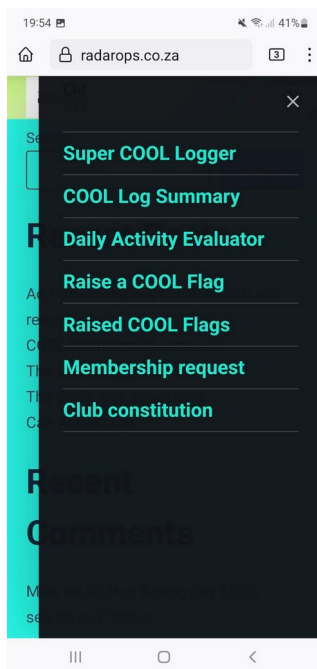
Note: Nothing stops anyone from still using The COOL and its facilities by for example “The COOL SSB Operators Club” with hyperlinks pointing to The COOL.

Wordpress allows for various devices to be used from desktops to smartphones and to display content in responsive ways. A browser is used which allows easy access to the blogs and to The COOL.

Desktop



Mobile



The regular advantages of using The COOL

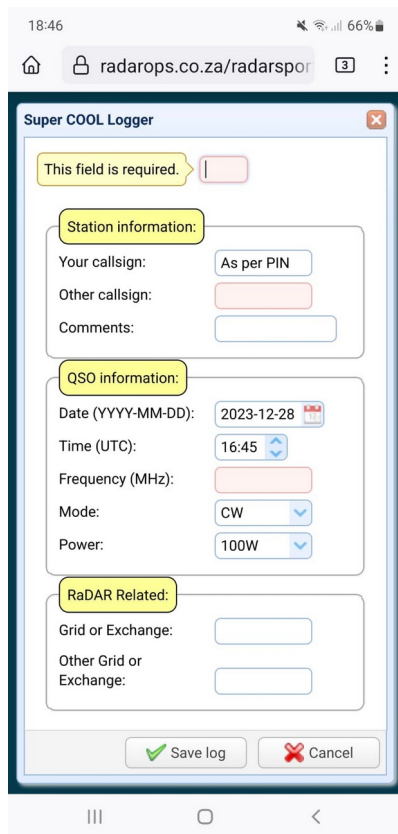
1. Supporting a community of like minded radio amateurs.
2. Easy to see the detail of activities within the community.
3. Accurate QSO logging and exchanges with the resulting discipline.
4. Promoting the use of grid locations or decimal coordinates.
5. Daily graphical activity reports to promote activity within the community.
6. Members of The COOL communities, of which there may be many, support each other by logging each QSO made no matter how many.
7. The COOL, in serving the community, also allows transfer of logs between other systems through ADIF files either by downloading or uploading.
8. Easy QSL card creation. (Double click / Screen capture).
9. Detail reports within any time frame using the Evaluator.

The advantages of using The COOL for CONTESTS

1. Easy sharing of contest logs.
2. No need to fill in complicated Excel spreadsheets.
3. No need to send logs in specific formats like ADIF's, Cabrillo's or a spreadsheet via email.
4. Results are available on the same day or at least within an agreed time frame.
5. Logs are OPEN for all to see. Open logs are central to The COOL concept.
6. A method of learning why leading contestants do well.
7. Preventing QSO's that don't serve the goals of the contest like hams "giving points away".
8. Easy contest evaluations that can be done by anyone online at any time.
9. All contestants need to store their logs on The COOL. No confirming QSO log, no points to the tester.

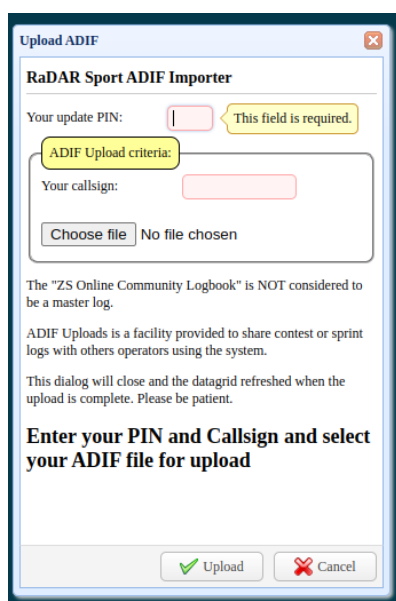
The COOL QSO logging methods

Logs can be entered manually using a smartphone or desktop computer / laptop. An Internet connection is a requirement being an online system. If out of range of the Internet, QSO's can be logged at your earliest convenience when back in range. **You log counts!**



The screenshot shows the 'Super COOL Logger' mobile application interface. At the top, the status bar shows the time 18:46, signal strength, Wi-Fi, and 66% battery. The browser address bar displays 'radarops.co.za/radarspor'. The application window has a title bar with a close button. Below the title bar, there is a yellow callout box that says 'This field is required.' pointing to an empty input field. The main form is divided into three sections: 'Station information' with fields for 'Your callsign' (set to 'As per PIN'), 'Other callsign', and 'Comments'; 'QSO information' with fields for 'Date (YYYY-MM-DD)' (2023-12-28), 'Time (UTC)' (16:45), 'Frequency (MHz)', 'Mode' (CW), and 'Power' (100W); and 'RaDAR Related' with fields for 'Grid or Exchange' and 'Other Grid or Exchange'. At the bottom of the form are two buttons: 'Save log' with a green checkmark and 'Cancel' with a red X.

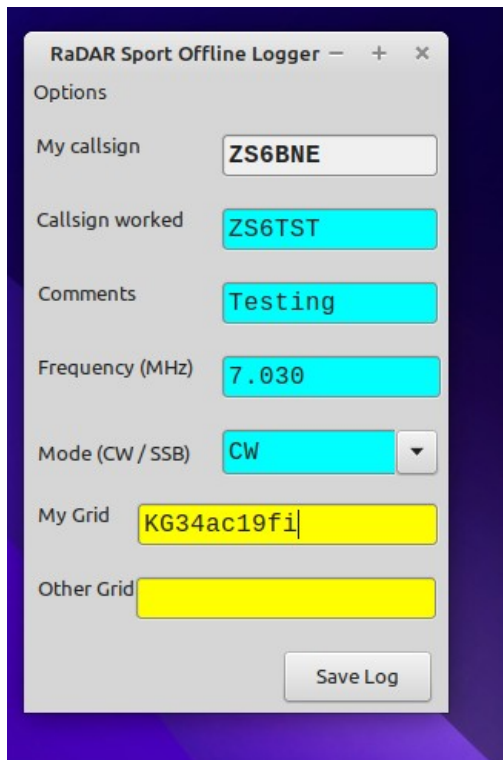
In the event of using an offline logging system, an ADIF upload can be done to share your logs with other community members on The COOL. Your registered PIN is required.



The screenshot shows the 'Upload ADIF' mobile application interface. The title bar has a close button. The main heading is 'RaDAR Sport ADIF Importer'. Below this, there is a field for 'Your update PIN:' with a yellow callout box that says 'This field is required.' Below that is a section titled 'ADIF Upload criteria:' with a field for 'Your callsign:'. Below the 'Your callsign:' field is a 'Choose file' button and the text 'No file chosen'. Below this section is a paragraph of text: 'The "ZS Online Community Logbook" is NOT considered to be a master log. ADIF Uploads is a facility provided to share contest or sprint logs with others operators using the system. This dialog will close and the datagrid refreshed when the upload is complete. Please be patient.' Below the text is a bold instruction: 'Enter your PIN and Callsign and select your ADIF file for upload'. At the bottom of the form are two buttons: 'Upload' with a green checkmark and 'Cancel' with a red X.

The RaDAR Sport COOL off line logger

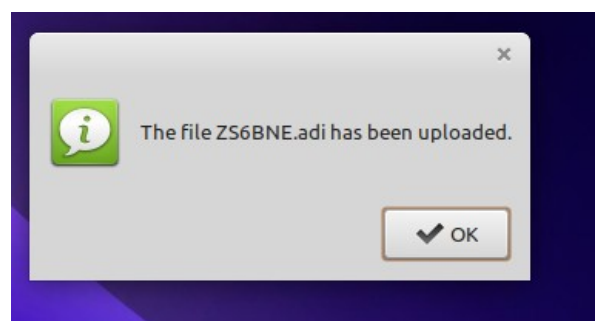
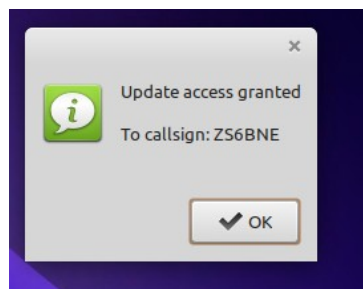
This is an off line logger developed using Lazarus on Linux (Much like Delphi) that is compiled individually with the callsign and PIN embedded and as such belongs only to the registered user. Still in an experimental phase.



The screenshot shows the 'RaDAR Sport Offline Logger' application window. It features a 'Options' section with several input fields and a 'Save Log' button. The fields are filled with the following information:

- My callsign: ZS6BNE
- Callsign worked: ZS6TST
- Comments: Testing
- Frequency (MHz): 7.030
- Mode (CW / SSB): CW
- My Grid: KG34ac19fi
- Other Grid: (empty)

The logs are stored locally. When ready, there are options for uploading where the program talks to The COOL via an online PHP interface. Security is checked before the logs are uploaded. The system makes use of OpenSSL which may have to be installed separately and as a result the system is still considered to be in development.



The COOL Evaluator

COOL Evaluator (Version 2.17 December 2023)

Evaluation criteria Submitted logs Unique callsigns Final result Bar chart

Search options:

Search CW mode only
 Search only QSO's outside ZS (General log activity)

Date / Time window:

Dates	Select	Times
Start date:	<input type="text"/>	Time (UTC): <input type="text"/>
End date:	<input type="text"/>	Time (UTC): <input type="text"/>

Evaluation options:

Option	Scoring guidelines	Submit
General log activity	One point per log entry	<input type="button" value="Submit"/>
COOL Sprint Evaluator	One point per COOL QSO QSL	<input type="button" value="Submit"/>
Super COOL Sprint Evaluator	One point per COOL QSO QSL including Exchange checks	<input type="button" value="Submit"/>

The COOL Evaluator integrates with The COOL. Reports can be requested within any time frame by specifying the start and end dates and times.

Search Options

1. If only searching for CW logs then the check box must be selected.
2. DX contacts outside South Africa (ZS) can be searched. This was introduced to analyse General Log Activity ignoring local contacts.

General Log Activity

Reports on all logs submitted to The COOL

COOL Sprint Evaluator

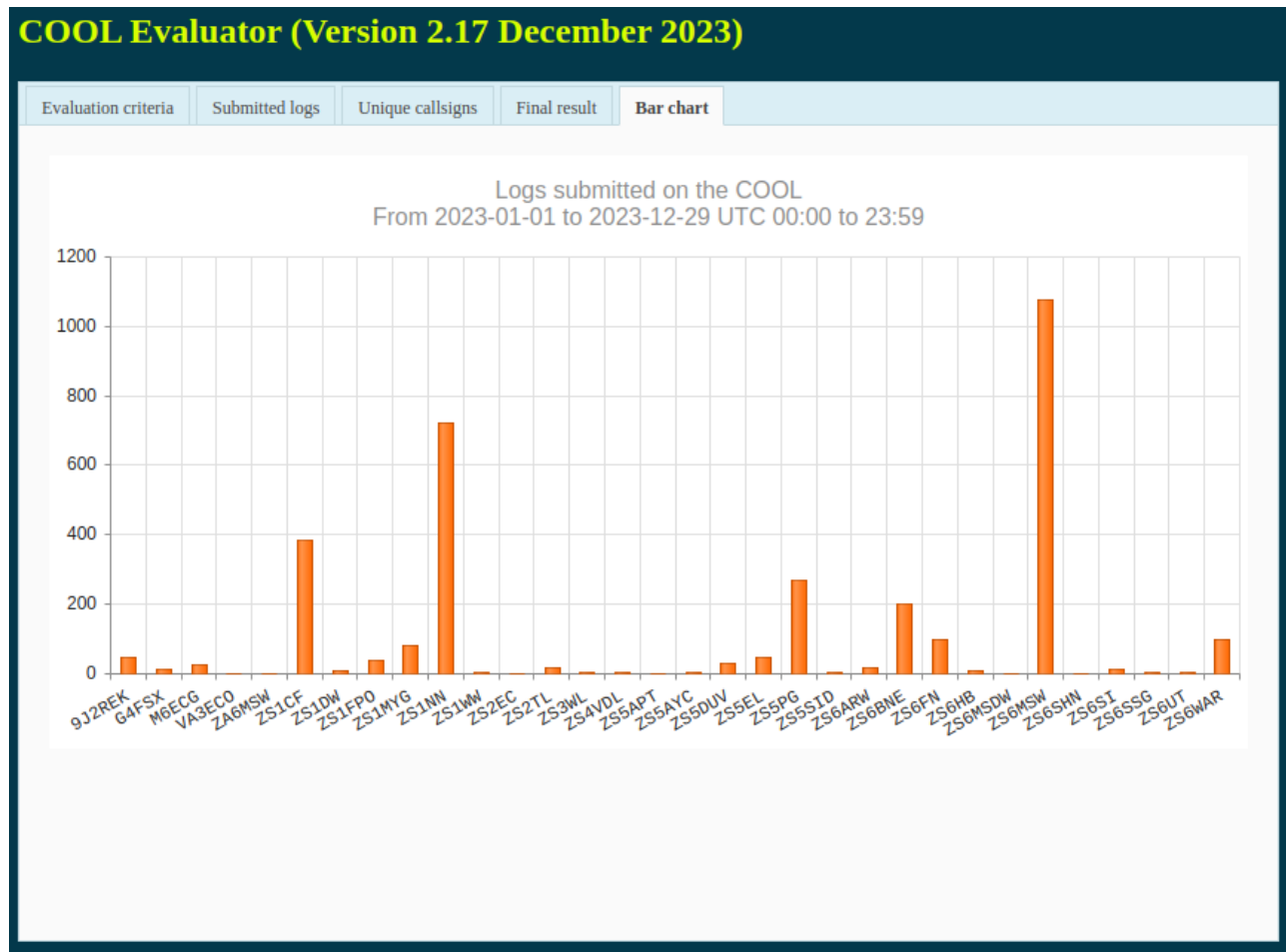
This option checks for confirmed logs where a flag has been set in the QSL field.

Super COOL Sprint Evaluator

This option checks for confirmed logs AND exchange checks being grid locator, GPS coordinates or any exchanged text.

Ideal for contest evaluations working on similar guidelines.

It takes a mere few seconds to generate a report. The Evaluator results are shown within the various tabs. This could be the result of an evaluated contest!



The leaders can clearly be seen. What better way than this to display contest results!

1. All the logs can be seen within the “Submitted logs” tab.
2. All callsigns that took part can be listed in the “Unique callsigns” tab.
3. The actual “Scores” can be seen in the “Final result” tab.

The COOL, is simply cool