Albuquerque Duke City Hamfest
and Convention
'It's a HamFiesta!'

DCHF

ARRL

TRLog for Linux:

A classic DOS contest logger updated to run on modern platforms.
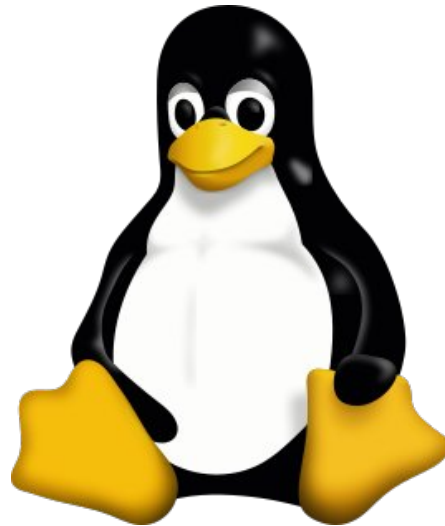
By Wayne Greaves, WØZW

Topics

- Objective

- The Big Picture

- A Brief History of Computer Logging

- What's so great about TRLog Linux?

- Features, Features, and More Features

- Installing, Configuring, and Using TRLog Linux

- Post-Contest Operations

- Additional Resources

Objective

To promote TRLog Linux within the Amateur community as a viable alternative to Windows® contest logging software.

The Big Picture

LOW IMPACT   HIGH IMPACT

Factors Affecting Your Contesting Performance

- Logging Software Selection*

- Practice
- Stamina
- BIC (butt in chair)
- Murphy

- Skill Level
- Station Config
- Experience
- Goal Setting

* A relatively minor factor.

Reasons to Change to a Linux Logger

☺ Allow migration away from Windows.

☺ Choose Open Source OS and Applications.

☺ Don't wish to run Win guest Virtual Machine.

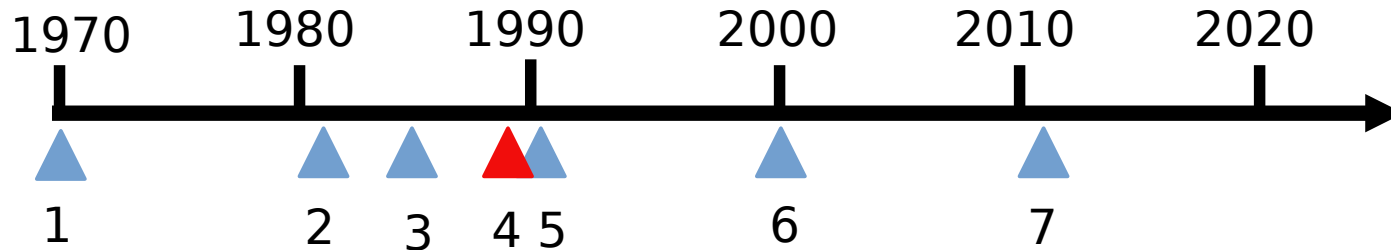🚫 To improve your score, rate, or standing.

Caveats

- Proficiency with the Linux operating system is required.
- Users must be comfortable:
  - Navigating Linux directory structure
  - Command line interface use
  - Text editing
- TRLog is <u>not</u> a modern GUI application
  - No drop-down menus or tabbed set-up windows
  - Requires use of Ctrl- and Alt- characters and Fn commands
  - Configuration command set is extensive

Brief History of Computer Logging

(1) Bell Labs develops Unix, 1970

(2) IBM Personal Computer (DOS) is released, 1981

(3) CT Logging Software by K1EA debuts, 1985

(4) N6TR releases TRLog (DOS), 1989

(5) Windows (3.1, 95, 98, et al) replaces DOS, ~1990

(6) Windows-based loggers gain popularity (N1MM, 2000)

(7) TRLog ported to Linux by Kevin Schmidt, W9CF, 2011

Why Consider TRLog Linux?

- One of the few contest loggers to run natively on Linux.

- Displays information in a very compact user window.

- Simple, efficient keyboard-based user interaction.

- Performs many advanced features.

- Extremely modest hardware requirements.

- Focus on the contest, not multiple data windows.

- It's FUN!

Instead of This...

All Info in One Window

Comparison

Feature	TRLog Linux	Windows Loggers
Information Display	Single window	Multiple user windows (typ)
Set-up/Configuration	LOGCFG.DAT text file	Various point-and-click config GUIs, pref. menus
User Input	Keyboard only	Keyboard and Mouse
Platform Requirements	Any Linux capatible arch.	Intel x86
Support resources	User forum, legacy DOS user doc. plus Linux update	Wikis, large user forums, updated user docs,email, auto updates, extensive web sites

Advanced Features

- Rig control (Elecraft, Yeasu, Icom built-in)

- Rotator control (DCU1 and Yeasu protocols)

- Realtime Score Reporting

- Digital Voice Keyer (DVK) support

- K1EL WinKeyer support

- Contest simulator

- Multi-station network support

- SO2R (Two-Radio) Support

- 2BSIQ mode

- RTTY Support (MFJ-1278 TNC, others configurable)

- Telnet Packet spotting

- Bandmap

Supported Contests

All Asian, All JA, AP Sprint, ARI, ARCI, ARRL 10, ARRL 160, ARRL DX, ARRL RTTY Roundup, ARRL VHF QSO, ARRL VHF SS, Baltic, Cal QSO Party, County Hunter, Croatian, CQ 160, CQ M, CQ VHF, CQ WPX, CQ WPX RTTY, CQ WW, CQ WW RTTY, European HFC, European Sprint, European VHF, Field Day, FISTS, Florida QSO Party, Grid Loc, HA DX, Helvetia, IARU, Internet Sprint, IOTA, JA International DX, KCJ, KVP, Kids Day, Mich QSO Party, MN QSO Party, NA QSO, New England QSO, NRAU Baltic, NZ Field Day, Oceania, Ohio QSO Party, OK DX, PACC, QCWA, QCWA Golden, RAC, Region One Field Day, ROPOCO, Russian DX, SAC, Salmon Run, South American WW, SP DX, Sprint, Stew Perry, Sweepstakes, Ten Ten, TOEC, Texas QSO Party, UBA, Ukranian, WAG, WAE, Wisconsin QSO Party, WRTC, World Wide Locator, XMAS, YO DX

Installation Options

- Binary Distribution (V 0.60 released 20 June 2024)
  - 64-bit for Intel processors
  - Ubuntu-based
  - Compatible with Mint and other Ubuntu derivatives
- Compile from Source
  - Files hosted on github.com
  - Verify needed libraries, header files on your machine
  - Requires C and Pascal compilers

Set-Up X-Terminal Session

- Requires single xterm window

- Designed to look and function like DOS version

- Two window sizes

  - DosTerm, 80 columns x 25 rows

  - BigDosTerm, 80 columns x 50 rows

Configure

- Guided Set-Up

    - Upon start-up TRLog will step you through setting up a new contest

    - Initializes necessary parameters for quick start

- Manual Set-Up

    - Create/edit LOGCFG.DAT file

    - Extensive set of configuration commands available (100+)

    - Tailor TRLog for specific behavior

Example LOGCFG.DAT

```
MY CALL = W0ZW
MY SECTION = NM
MY FD CLASS = 1B
CONTEST = FIELD DAY
DISPLAY MODE = COLOR
SIMULATOR ENABLE = FALSE
SOUNDCARD DEVICE = hw:0,0
CODE SPEED = 20
CW SPEED INCREMENT = 2
RADIO ONE TYPE = K2
RADIO ONE CONTROL PORT = SERIAL /dev/ttyUSB0
RADIO ONE BAUD RATE = 4800
WINKEYER PORT = SERIAL /dev/ttyUSB1
SHIFT KEY ENABLE = FALSE
```

Edit LOGCFG Values On-The-Fly

Linux Considerations

- Run TRLog as a normal user (vs. superuser)
- File names are all Upper Case (as in DOS version)
- Use full Unix I/O device path instead of DOS port nos.
- Need R/W permissions to ports
  - Add username to Group which owns port (e.g., dialout group)
- To access PC speaker use "beep soundcard enable" command

CQ Mode Example (1 of 2)

CQ Mode Example (2 of 2)

Alt-H for Help

Post-Contest Operations

- POST – a program for after-contest log operations
- Check for duplicates
- Generate rate sheet
- Generate Cabrillo file
- Generate ADIF file
- Generate QSL labels
- Other interesting and useful functions

POST Initial Screen


```
                    w@pluto: ~/TRlog                           _ □ ✕

         TR POST CONTEST PROGRAM   Version Linux 0.59

Welcome to the TR Post Contest Program.  You will find many procedures and
utilities here to help you after the contest.  There are a number of procedures
under the Log procedures menu.  These will perform various things to your log
file.  The QSL procedures menu has everything you need to support QSLing.  The
Report procedures menu has a number of different reports that can be generated
and finally the Utility procedures menu has a number of little programs to make
your life easier.  To get more information on any of these, go into the desired
menu and execute the procedure you are interested in.  An explanation of the
procedure will be displayed and you will always be able to exit the procedure
before actually doing anything (use ESCAPE or RETURN with no input).

Free memory = 2147483647

  F - Change active log filename (active logfile = LOG.DAT).
  C - Create Cabrillo File.
  L - Log procedures menu.
  P - Post contest log processor (steps you through most everything).
  Q - QSL procedures menu.
  R - Report procedures menu.
  U - Utility procedures menu.
  X - Exit program.

  Enter command : █
```

POST Utility Menu

```
w@pluto: ~/TRlog                                    _  □  ⊗

             UTILITY PROGRAM MENU

A - Append program (append LOG.DAT to history files).
B - ADIF file to TR Log file convert.
C - Check country and zone for specified callsign.
D - Date/time change for a log.
E - Edit TRMASTER.ASC file (menu).
F - ADIF convert tool.
G - Global log search (list of calls not in a log.
H - Get beam headings and distance between grids.
L - Convert Cabrillo Log to TR Log.
M - Merge Cabrillo files into single file.
N - NameEdit (old NAMES.CMQ database editor).
Q - NAQP exchange checker
S - Show contents of RESTART.BIN file.
T - Transmitter ID assign by band for Cabrillo.
Y - Download new country file.
X - Exit utility program menu.

Enter command : █
```

User Observations

- No fancy windows, icons, graphics
- Info common to most contest loggers is all there
- Read the manual (278 pgs.)
- Requires experimentation with the various commands
- Doesn't disappoint in the heat of the battle
- Allows focus on the contest, not the contest software

Summary

- TRLog is a simple and compact, yet surprisingly powerful, contest logger.

- Viable contest logger for the Linux shack computer or for making the switch to Linux.

- Requires a comfort level with Linux administration (not plug and play).

Additional Resources

- N6TR TRLog website: https://www.trlog.com/

- W9CF TRLinux website: https://www.kkn.net/trlinux/

- Github TRLog Linux page: https://github.com/trlinux

- TRLog mailing list: http://lists.contesting.com/_trlog/

Acknowlegements

I wish to thank Larry "Tree" Tyree, N6TR, for kindly reviewing this presentation for accuracy and for his unique insights.

I also wish to thank Kevin Schmidt, W9CF, without whom TRLog Linux would not exist.

Questions