Nevada County Sheriff's Search and Rescue

Radio Log Software Features Overview

Open Source project, ©2015 Tom Grundy

github.com/ncssar/radiolog

www.ncssar-nc.org

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Free to use, distribute, and modify; intended for the Search and Rescue community

Features Overview

General Radio Log management

- Intended to be user-friendly and intuitive, with no training necessary to make use of key features
- Most features are automated
 - Less overhead = Reduced Fiddling
 - Fewer options = Reduced Fiddling
 - Reduced Fiddling = more effective Radio Operator

Features Overview

Key Features

- Team Tabs
- Timeouts / Welfare Check reminders
- Team Status
- Clue management
- Kenwood FleetSync interface
- Message Stack
- Amendable messages
- Multi-Operational Period support
- Printing
- Automatic file management

Features Overview

Team Tabs

- Team Tabs section is shown below the main Radio Log section
- Each Team Tab shows all radio log entries to or from that team
- Tabs are automatically created on the first message from a team
- Tab label background color indicates Team Status
- Tabs for teams with status 'At IC' are (optionally) removed when Operational Period is changed
- Individual Tabs can be removed / hidden at any time
- Tab contents can be printed separately

Features Overview

Timeouts / Welfare Check reminders

- Keeps track of time since last message FROM each team
- Timeout duration can be changed at any time (default = 60 min.)
- Team Tab label flashes red when timed out
- Team Tab label flashes orange 5 minutes before timeout
- Teams with status 'At IC' cannot time out

Features Overview

Team Status

- Each team has a 'Status' that can be updated during new entries
- Teams with any status (except 'At IC') can still time out
- Each team's Status:
 - determines color of team tab label
 - shows up in the New Entry Dialog for that team
 - is recorded in each radio log entry

Features Overview

Team Status (continued)

- Possible Values:
 - At IC: green label; team cannot time out
 - In Transit: blue label
 - Working: white label, black border
 - Waiting on Transport: flashing blue label; alternates with timeout color
 - STANDBY: flashing black label; alternates with timeout color
- Normal progression of Status for each team during a search:
 - At IC → In Transit → Working → (Waiting on Transport) → In Transit → At IC

Features Overview

Clue Management

- Clue Reports
 - Created as needed during incoming messages
 - Clue Number is automatically incremented, but can be changed
 - Normally printed when entered, on existing Clue Report form
- Clue Log
 - Automatically created by the system based on incoming clues
 - Radio operator can also create a 'non-radio clue'
 - Normally printed at end of each Operational Period
 - Individual clue reports can also be printed from the Clue Log dialog

Features Overview

Kenwood FleetSync interface

- Incoming FleetSync message opens a New Entry Dialog
- Works with up to 2 connected mobile radios
- Automatic USB port scanning no options to set
- Default Callsign lookup table
- Easy interface to change Callsigns on incoming message
- No outgoing FleetSync features in this version: this is not a full FleetSync command interface console

Features Overview

- Kenwood FleetSync interface (continued)
 - GPS-enabled microphone interface incoming coordinates are:
 - Recorded in the radio log
 - Forwarded on the network as SARSoft locators
 - Convertible between NAD27 CONUS and WGS84
 - Convertible between UTM, D.d°, D° M.m', D° M' S.s"

Features Overview

Message Stack

- A clean, intuitive way to handle concurrent messages
- All messages are managed / shown like a 'stack of dishes'
- Message Stack Window stays 'on top' of all other windows, until all pending messages are accepted or canceled
- New Incoming Message normal operation:
 - creates a New Entry Dialog on the TOP of the Message Stack
 - The new (top) entry is activated

Features Overview

Message Stack (continued)

- New Incoming Message when an existing message is active:
 - 'Continue Time': new incoming message will NOT create a New Entry Dialog, if there is already an open New Entry Dialog FROM the same team, which has been modified (typing / clicking) within the last 'Continue Time' number of seconds; i.e. the new incoming message is part of a "continued conversation", therefore does not need its own new entry.
 - 'Hold Time': new incoming message from a different team WILL create a New Entry Dialog at the top of the stack, but WILL NOT be activated / steal focus, if the active dialog has been modified within the last 'Hold Time' number of seconds; i.e. "Please hold, I am still working on this message."

Features Overview

Amendable messages

- All messages can be amended from right-click menu
- Previous message text is preserved:

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AMENDED: amended message text; WAS: original message text
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Messages can be amended repeatedly

Features Overview

Multi-Operational Period Support

- Operational Period (OP) begins at 1
- Can be changed at any time (default is to increment by 1)
- When OP is changed:
 - Radio Log, Team Logs, and Clue Log are (optionally) printed for finished OP
 - Entry is added to Radio Log, indicating OP change

Features Overview

Printing

- Radio Log, Team Logs, Clue Log: PDF is built from scratch
- Clue Reports: Existing 'fillable' Clue Report Form PDF is automatically 'filled out', then saved as a new PDF per clue
- Generated PDF files are saved and sent to the default printer

Features Overview

Automatic file management

- Automatic save after every entry, in two directories
 - Three files: Radio Log, Clue Log, FleetSync Lookup Table
 - All files are .csv readable by Excel, or as plain text if needed
- Automatic backups are made after every five entries
- The last five backups are always available
- Automatic crash detection and recovery
- Can load previous radio log files at any time

Features Overview

Thank You

• Please contact the author if your SAR team is interested in using this software. This project was not originally intended to be usable by other county SAR teams. Some conversion may be needed, due to different procedures, protocols, forms, etc.

• Future enhancements may invalidate parts of this overview.