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pi@ZIL-Kiwi:~/wsprdaemon $ ./wsprdaemon.sh -h
usage:                VERSION = 2.9d
    /home/pi/wsprdaemon/wsprdaemon.sh -[asz} Start,Show Status, or Stop the watchdog daemon

     This program reads the configuration file wsprdaemon.conf which defines a schedule to capture and post WSPR signals from one or more KiwiSDRs
     and/or AUDIO inputs and/or RTL-SDRs.
     Each KiwiSDR can be configured to run 8 separate bands, so 2 Kiwis can spot every 2 minute cycle from all 14 LF/MF/HF bands.
     In addition, the operator can configure 'MERG_..' receivers which posts decodes from 2 or more 'real' receivers
     but selects only the best SNR for each received callsign (i.e no double-posting)

     Each 2 minute WSPR cycle this script creates a separate .wav recording file on this host from the audio output of each configured [receiver,band]
     At the end of each cycle, each of those files is processed by the 'wsprd' WSPR decode application included in the WSJT-x application
     which must be installed on this server. The decodes output by 'wsprd' are then spotted to the WSPRnet.org database.
     The script allows individual [receiver,band] control as well as automatic scheduled band control via a watchdog process
     which is automatically started during the server's bootup process.

    -h                          => print this help message (execute '-vh' to get a description of the architecture of this program)

    -a                          => stArt watchdog daemon which will start all scheduled jobs ( -w a )
    -z                          => stop watchdog daemon and all jobs it is currently running (-w z )   (i.e.zzzz => go to sleep)
    -s                          => show Status of watchdog and jobs it is currently running  (-w s ; -j s )
    -p HOURS                    => generate ~/wsprdaemon/signal-levels.jpg for the last HOURS of SNR data

    These flags are mostly intended for advanced configuration:

    -i                          => list audio and RTL-SDR devices attached to this computer
    -j ......                   => Start, Stop and Monitor one or more WSPR jobs.  Each job is composed of one capture daemon and one decode/posting
daemon
    -j a,RECEIVER_NAME[,WSPR_BAND]    => stArt WSPR jobs(s).             RECEIVER_NAME = 'all' (default) ==  All RECEIVER,BAND jobs defined in
wsprdaemon.conf
                                                          OR       RECEIVER_NAME from list below
                                                               AND WSPR_BAND from list below
    -j z,RECEIVER_NAME[,WSPR_BAND]    => Stop (i.e zzzzz)  WSPR job(s). RECEIVER_NAME defaults to 'all'
    -j s,RECEIVER_NAME[,WSPR_BAND]    => Show Status of WSPR job(s).
    -j l,RECEIVER_NAME[,WSPR_BAND]    => Watch end of the decode/posting.log file.  RECEIVER_ANME = 'all' is not valid
    -j o                        => Search for zombie jobs (i.e. not in current scheduled jobs list) and kill them

    -w ......                   => Start, Stop and Monitor the Watchdog daemon
    -w a                        => stArt the watchdog daemon
    -w z                        => Stop (i.e put to sleep == zzzzz) the watchdog daemon
    -w s                        => Show Status of watchdog daemon
    -w l                        => Watch end of watchdog.log file by executing 'less +F watchdog.log'

    -v                          => Increase verbosity of diagnotic printouts
    -d                          => Signal all running processes as found in the *.pid files in the current directory to increment the logging verbosity
                                   This permits changes to logging verbosity without restarting WD
    -D                          => Signal all to decrement verbosity
    -u CMD                      => Runs on wsprdaemon.org to process uploaded *.tbz files.  CMD: 'a' => start, s => 'status', 'z' => stop

    Examples:
     wsprdaemon.sh -a                    => stArt the watchdog daemon which will in turn run '-j a,all' starting WSPR jobs defined in
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'/home/pi/wsprdaemon/wsprdaemon.conf'
     wsprdaemon.sh -z                      => Stop the watchdog daemon but WSPR jobs will continue to run
     wsprdaemon.sh -s                      => Show the status of the watchdog and all of the currently running jobs it has created
     wsprdaemon.sh -j a,RECEIVER_LF_MF_0,2200   => on RECEIVER_LF_MF_0 start a WSPR job on 2200M
     wsprdaemon.sh -j a                     => start WSPR jobs on all receivers/bands configured in /home/pi/wsprdaemon/wsprdaemon.conf
     wsprdaemon.sh -j z                     => stop all WSPR jobs on all receivers/bands configured in /home/pi/wsprdaemon/wsprdaemon.conf, but note
                                           that the watchdog will restart them if it is running

    Valid RECEIVER_NAMEs which have been defined in '/home/pi/wsprdaemon/wsprdaemon.conf':

        Index    Recievers Name          IP:PORT
          0           G3ZIL_1       10.0.1.89:8073
          1           G3ZIL_2       10.0.1.102:8073
          2               KPH       kphsdr.com:8075
          3             N6GN2       n6gn.no-ip.org:8075
          4              N6GN       n6gn.no-ip.org:8073
          5       MERGED_RX_0       G3ZIL_HF,AUDIO_0

    WSPR_BAND  => {2200|630|160|80|80eu|60|60eu|40|30|20|17|15|12|10|6|2|1|0}

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    I would appreciate reports which compare the number of reports and the SNR values reported by wsprdaemon.sh
        against values reported by the same Kiwi's autowspr and/or that same Kiwi fed to WSJT-x
    In my testing wsprdaemon.sh always reports the same or more signals and the same SNR for those detected by autowspr,
        but I cannot yet guarantee that wsprdaemon.sh is always better than those other reporting methods.
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