Notes de butinage à propos de KPLEX

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Origine

http://www.stripydog.com/kplex

Installation

(date un peu mais j'ai pu faire ma première configuration avec cela).
http://andersonsabroad.com/blog/raspberry-pi-marine-computer/step-4-install-kplex-nmea-multiplexer/

https://groups.google.com/forum/#!topic/kplex/vwYayU_Jy3M
If you just dpkg -i the newly downloaded deb file it will install it but won't restart the currently running process. To restart once installed, either reboot the machine or "sudo service kplex restart"

Voir le chapitre sur « replay183 » pour lire des logs NMEA,
https://groups.google.com/forum/#!topic/kplex/DFnMJjmwPE4
suite à https://groups.google.com/forum/#!topic/kplex/7AZtOUZ991A

Time Server on RPi combined with KPlex

https://groups.google.com/forum/#!topic/kplex/wIVDH4ZHcHo
--> https://github.com/limifly/ntpserver/blob/master/ntpserver.py

Chris van Gorp 14/09/2017
has anyone created a Network time server using GPS data from KPlex ?
I would like to have some hints and tips to extend my current RPi setup

Keith,
thanks for your reply. I look forward to your notes.
Currently I use Kplex for my AIS decoder that feeds into AISHUB, MarineTraffic and Fleetmon
Excellent performance, my check script that runs every 5 minutes only needs to restart the AIS decoder that fails during lightning (bad wheater) and that's about 2 times a year.
I have a GPS that I want to hook up to that same RPi and make the time server.
I am now looking at this python script I found on : https://github.com/limifly/ntpserver/blob/master/ntpserver.py
Op donderdag 14 september 2017 14:23:36 UTC+2 schreef Keith Young:
yes but there's no point in doing it from RMC etc. sentences alone: the latency and jitter render it useless. My set-up involved an adafruit ultimate GPS with a PPS output. kplex was used to accept NMEA input from the GPS and feed that to both ntpd and the network. The PPS line was fed to one of the gpio pins on my raspberry pi. It's probably less hassle to do it all with gpsd but I did it as an exercise. I meant to write it up at the time but didn't. I'll see if I can re-create it this weekend and write some notes. But I'll emphasise that there's really no point in doing this without a PPS signal. The most I'd be tempted to to with just GPS sentences would be a one-shot date initialisation after a system had booted if there was no other source of time data

How to output Kplex NMEA sentances to the terminal

Kplex lancé à la main, pas en usage comme service / daemon.
https://groups.google.com/forum/#!topic/kplex/kmoi2w33ugg

Virtual Serial port / TCP connection

Connexion via TCP entre 2 Rpi, via ethernet, + pty
https://groups.google.com/forum/#!topic/kplex/A9K4GyaHy4c
un francophone dans la réponse

Restricted list of nmea headers

Comment faire passer des phrases non-standard ?

https://groups.google.com/forum/#!topic/kplex/u-P9b-esMQk

Should be OK but traps may include:
* If your custom sentences don't include an NMEA checksum, don't forget to use the "checksum=no" option
* If they don't end with \r\n then use strict=no
* Ensure the custom data is 74 characters or less (with the disclaimer that stuff from memory is always subject to an off-by-one error...

How to configure kplex for incoming data over WiFi?

https://groups.google.com/forum/#!topic/kplex/BSDtYShrnkc

replay183

Replay un fichier log
C'est un outil dédié en dehors de kplex !
https://groups.google.com/forum/#!topic/kplex/DFnMJjmwPE4
→ https://github.com/stripydog/replay183

Every so often someone asks "How can I replay boat data I've logged?". Usually this is for testing something at home with data logged on board. Curiously not an issue which troubles those of us who live on boats but no matter...

In order to "play back" a logged data stream we have to record not only the data we see, but when we see them so that the timing between data is the same on replay as when it was recorded.

You can log sentences to a log file by specifying a "file" interface. If adding it on the command line it would look like this:

file:direction=out,filename=/tmp/logfile,timestamp=ms

That last bit tells kplex to add a millisecond timestamp in NMEA-0183v4 TAG format.

Unfortunately we can't just feed this log file into another instance of kplex. Those of you who've tried this will know that kplex just reads its inputs as fast as it can (discarding TAG blocks). This is generally faster than it can send over a network or serial lines, so inevitably some data will be lost if there is too much to buffer.

I've hacked together a program to replay timestamped data. Source is on github:
https://github.com/stripydog/replay183

To replay data, first log it with TAG timestamps. Millisecond timestamps are much better for this than second resolution timestamps. The syntax for replay183 is:
replay183 [-r] <filename>

where <filename> is your log file. The first timestamped sentence is sent to standard out immediately, with subsequent timestamped sentences sent at the same times relative to the first as they were when recorded. Without "-r", sentences are terminated only by a newline (<LF>) which is convenient for piping into the standard input of kplex. With "-r", sentence are "correctly" terminated with "<CR><LF>". Note that this isn't replaying exactly as they were sent as we're taking liberties with sentence termination according to the replay needs.

It's all a bit rough and ready but it's there to play with if anyone needs it

Demande pour des fichiers log avec timestamp

« To santa claus »
https://groups.google.com/forum/#!topic/kplex/UlY97cTJUdg

La solution est « replay183 »
https://github.com/stripydog/replay183